9-5/OG 9-3 Key FAQ/How-To

The 9-5 and Original 9-3 were the first Saabs to use an electronic key. Gone is the ability to simply have your hardware store cut you a spare key, these keys must be electronically programmed to the car that they will be used with. There is a lot of confusion and questioning on the respective boards regarding these keys, how to add more, what to do when you lose them all, etc. Hopefully, this FAQ will answer all the questions regarding these keys.

This FAQ/How-to does not apply to any vehicle other than the 1999-2002 Saab 9-3 (and 2003 9-3 CV) and the 1998-2009 Saab 9-5. Earlier cars do not require programming as extensive as this, and the 9-3 SportSedan/SportCombi are a different breed altogether.

1. What is an "electronic key"

An Electronic Key is a key that contains an electronic device called a transponder (See Figure 3). Each transponder has a specific code embedded in it. The car must be made aware of the key and its transponder by programming with Tech 2.

2. How does it work?

When you insert the key into the ignition, the TWICE module (Theft Warning Integrated Central Electronics) energizes a loop of wire surrounding the ignition key. The electromagnetic field generated by this loop (think of a very weak electromagnet) provides power to the transponder. The transponder sends its electronic code, which is read by the same loop, and TWICE then checks to see if the transponder's code is in the list of "accepted" keys. If it is accepted, TWICE tells Trionic all is well, and Trionic starts the car. The message "KEY NOT ACCEPTED" will appear in the SID if it is not accepted, and the car will not start.

3. Does it require a battery?

The transponder does not require any sort of battery to operate. As stated above, the antenna coil around the ignition switch provides the power for the transponder. However, if you have a key that has an integrated remote for the doors and trunk, that part requires a battery to operate. (more on the types of keys later).

4. Does the key have to be cut?

Yes. Although the transponder provides for the electronic unlocking of the car's engine, the key must still be cut for the lock cylinder to turn the ignition and door locks.

5. Does the key need to be programmed to the car to open the doors or trunk (manual door/trunk operation)?

No. All that is needed to get in to the car is a key blank cut for the key code of the car. Only the starting function requires the key be programmed to the car.

6. How many types of keys are there?

There are four types of keys. The first three are interchangeable on 1998-2003 cars. The last is for 2004 and up 9-5s only.

- a. Transponder Key 1: Plastic body, seam that goes circumferentially around the head of the key, in the same plane as the key shaft. Small "SAAB" logo. Opening the key head gives you one half of the head with the transponder chip in it, and the other half of the head is attached to the shaft. Easy to separate and open.
- b. Transponder Key 2: Rubberized body, seam that goes around the head perpendicular to the key shaft. Big "SAAB" logo. Separating the key parts gives you the shaft with the base of the head, and the transponder part with the loop of the head. Very hard to separate and open (don't try, unless you know what you're doing).
- c. Remote Key 1: Introduced for 2001, this key incorporates the remote door/trunk lock/unlock with the Transponder function. Three buttons on the key, with icons for unlock, lock, and trunk. Battery required for remote function. Door on the back of the key opens to change battery or exchange the "guts".
- d. Remote Key 2: Introduced late in the 2003 model year, this key is like Remote Key 1, except the metal shaft is a different size. It is not interchangeable with the first three.



Figure 1: From left: Transponder Key 1, Transponder Key 2, Remote Key (both styles showing cover, battery & "guts")



Figure 2: Detail of the two styles of "Remote Key". On the left, is "Remote Key 1". The blade is the same for this key, the two "Transponder Keys", and also the 9000 and 1994-1999 900. On the right, is "Remote Key 2", used on the 9-5 starting with chassis number 33026907 (late model year 2003). Although the "guts" that contain the transponder and remote lock & unlock are the same between the two keys, the key blades are different.

7. What about remote door unlocking (Keyless entry), etc.?

The "Remote" function is handled by either a separate, black, "banana" remote, with the Transponder Keys, or the built-in remote function of the Remote Keys. Each type of remote allows one to unlock the doors, lock the doors, and unlock the trunk/tailgate/hatch (depending on model). Functionally, the two are interchangeable. A car can have all bananas, all integrated, or a mix.

8. Do the remotes need to be programmed to the car?

Yes!, The remotes work in the same manner as, say, your garage door opener. You don't want just anybody to be able to open your garage door or car, so the car must be programmed to accept your remotes.

9. How many keys and remotes can I have programmed to the car?

A good question. The maximum number of keys is four (4), and the maximum number of remotes is also four (4).

10. How do I know how many are programmed to my car?

You can view this information as follows:

- a. Turn the ignition key to the "ON" position and wait one minute.
- b. Press the trunk unlock button on the key or banana remote.
- c. The SID will display:

X: REMOTE KEY (X = the number of remotes for the doors)
X: TRANSPONDR (X = the number of key transponders)

Note that one "Remote Key" has one transponder and one remote. When purchasing a car, always check this function and make sure you get all the keys and remotes that are programmed to the car. If you don't get the full number, have the keys and remotes you do get reprogrammed to the car, which will prevent any missing keys from operating the car.

11. What is a "TRANSPONDR", What is a "REMOTE KEY"?

A "TRANSPONDR", or, Transponder, is a tiny chip located inside the key. It is powered and activated by being in the proximity to the ignition lock cylinder. It reports a code to TWICE that is checked against a list of programmed Transponders, and if it is on the list, it will disarm the starter interlock, and allow TRIONIC to start the engine when you turn the key to the "START" position. The Transponder is located in the part of the key that does NOT have metal shaft. See Figure 1: For Transponder Key 1, that's the cover to the left, for Transponder key 2, it's the part with the keyring slot at the top, and for the Remote Keys, it is the "guts" that also hold the remote for the doors and alarm.

A "REMOTE KEY" is the electronic device that locks and unlocks the doors, unlocks the trunk, and provides the "panic mode". It is either the "banana" style remote fob, or the "guts" of the "Remote Keys".



Figure 3: The Transponder is shown here resting on a US one cent coin. The transponder is 15mm in length. The transponder is not available as a separate spare part, only as part of the "Key Head" part for the Transponder Keys, and is integral with the "guts" of the Remote Keys.



Figure 4: The Transponder is shown installed in the Key Head for Transponder Key 1. The installation is slightly different in the Key Head for Transponder Key 2.

12. How do I add new keys or delete old keys?

To add new keys, or to delete old keys, a Saab technician (Dealer or Independent Specialist) with a Tech 2 device must re-program the TWICE module. The owner cannot do this, nor can a mechanic with a generic "code scanner". Only someone with a Tech 2.

In order to do this, the owner must bring the car and **all** keys and remotes to the technician. The technician will start the programming process, and program each transponder and each remote to the car.

NOTE 1: YOU MUST HAVE ALL KEYS & REMOTES THAT YOU WISH TO OPERATE THE CAR, OR WORK THE DOORS & TRUNK WITH YOU ANY TIME YOU PROGRAM KEYS & REMOTES TO THE CAR. ANY KEY/REMOTE NOT PRESENT WILL NO LONGER START THE CAR OR OPEN THE DOORS.

NOTE 2: THERE MUST BE ONE KEY ALREADY PROGRAMMED TO THE CAR IN ORDER TO START THE KEY PROGRAMMING PROCESS.

(Thanks to Anders (SWEDECAR) for reminding me to put this in.)

You cannot add or delete just one key or remote. You must do them all at the same time, any time you need to add or delete keys and remotes.

13. How many keys should I have?

The barest minimum is two. That assumes that one key will be left where it can be gotten to if the first one is lost. A recommendation is to have at least one more key/remote combination than you have regular drivers for the car. For example, if a person and their spouse each have a key, the car should have a minimum of three programmed to it, with the third kept in a safe place.

Overall, the more keys and remotes, the better. Keys and remotes are cheap. Replacing TWICE is not.

14. What happens if I lose all the keys and remotes?

Believe me, you do not want this to happen. Should you lose all of the keys and remotes, then a new TWICE module must be purchased, along with at least one new key. The new TWICE module must be programmed to the car, as well as the new key(s). This is an expensive proposition. You can save a bit by purchasing a used TWICE with key from an online auction site, but it is far, far better to never let yourself get into this situation by keeping as many keys as possible available for the car.

15. SID says: " REPLACE KEY BATTERY "

This means that the battery for the remote – either the banana or the built-in remote – is getting weak, and should be replaced. Press the "CLEAR" button on the SID to acknowledge the message. You should replace the battery very soon. There is not a lot of advance warning. The battery types are:

Banana Remote: CR 2032, 3V lithium Integrated remote: CR 1632, 3V lithium

16.I changed the battery in my remote, and now my car doors won't unlock! What do I do?

Don't panic, this is normal. When you replace the battery, you have to press the "UNLOCK" button four (4) times in succession (near the car, of course...). This re-synchronizes the remote with the car.

17. My keys have been working normally, but now I am seeing "KEY NOT ACCEPTED" on the SID. What is wrong?

There could be several reasons for this failure. The key may have been damaged in some way, or other components in the system have failed. You can still start the car by turning the ignition to "ON", and pressing one of the keys on the remote. The remote signal is then substituted for the transponder signal, and if the remote signal is accepted, the car will start (the exact function may differ slightly between 9-3 and 9-5 cars). Have the system checked by a Saab dealer or independent specialist.

18. "I got dropped off at the airport today. When I got out of the car (I was driving), I removed my key, and put in my new spare. I just picked up the spare at the dealer. The car was driven back to the office. When they went to pick me up at the airport that night, "

KEY NOT ACCEPTED" was in the SID, and they could not start the car. What happened?"

Don't laugh, this is a true story. TWICE does not maintain constant communication with the key and transponder. Basically, it polls the key when you insert it, and then not again, until you go to insert it again. However, there is a 30-second "window" where if you shut the car off and remove the key, TWICE does not poll the key again, even if you re-insert it and turn it to start the car! So long as the key turns the ignition lock, the car will start. What happened to this poor soul was that they picked up the spare key, but did not get it programmed to the car. They switched the keys inside that window of time, the car started, and was fine all the way back to the office. Hours later, TWICE polled the spare when it was inserted, and rejected it.

19. Can I get a key to use at the beach or while diving, boating or skiing?

The answer is a qualified yes. The simplest and cheapest way is to take whatever you already have, put it in a watertight container, and secure it about your person. If you have the banana remote, you do NOT need to bring that, as the metal key will always operate the doors & disarm the alarm, as long as your car has a mechanical door lock. If you have a 9-3, or a 9-5 up to chassis 33026906, you can get all the parts to make a Transponder Key 2, which is the most indestructible version. Have that programmed as your spare, and you are good to go. If you have a 9-5 from chassis 33026907, you are stuck with the "Remote Key 2". You *cannot* use a "Remote Key" without the "guts", or a "Transponder Key" without its head to start the car. The transponder is part of the "guts", or installed in the "head".

Adding/Replacing Keys or Remotes

If you do lose a key or a remote, you should replace it soon. The first reason being you will want to have the "safety net" of the spare key and remote, the second is to make sure that the lost key/remote can no longer open or start the car!

What you do may depend on which key you have, and whether the key is simply damaged, or lost completely. If you have a transponder key with banana remote that was damaged or lost, then you can replace any or all of the three components (key blank, transponder, remote) on an individual basis. However, this often proves to be the most expensive option.

If you have a Transponder Key, the usual course of action to add on or replace it is for the new key to be a Remote Key. This saves space over the key with separate remote, and also is cheaper.

So, to add on or replace a Remote Key (both types), you would one of the following:

- 1. Take your VIN or Key Code to a Saab dealer, and purchase an entire new Remote key and have it programmed to the car. This will set you back well over \$100.
- 2. Buy a cut key from the dealer, then buy another key from an online auction site, swap parts, and program the new key to your car.

The first option is the easiest. Whether the dealer will program the key for a fee or not, is up to the dealer.

The second option has a few steps to it:

- 1. Buy a new Remote Key (shaft & housing only) cut to your VIN or Key Code from a dealer. About \$35 each.
- 2. Visit an online auction site, bid on and purchase a used Remote Key that has the remote guts in it. Figure between \$20 and \$30. I wouldn't pay more than \$30. There are plenty out there.
- 3. When you receive your auction site purchase, carefully open the key, take the remote guts out of this key, and install it in the key cut to your VIN, with a new battery.
- 4. Discard the key shaft and housing from the auction key.
- 5. Repeat for any other extra/replacement keys
- 6. Take all of the keys (see note in red above) with the car to a dealer or Saab Specialist with a Tech 2, and have them program the keys and remotes to the car. Your dealer or specialist may charge you a fee for the programming, which may be a flat fee, or a minimum based on their hourly rate. Don't assume, ASK!
- 7. Enjoy your new key(s)!

A note regarding service charges for keys & programming them.

When taking keys to a Saab dealer or specialist for programming, one should expect to pay for the shop technician's labor. Rates vary, but a customary charge might be 1/2 hour to a full hour of shop time, (at their posted rate) for the technician's labor, if the shop does not have a flat rate for key programming. *Always ask!*

Shops need to pay technician's wages, train the technicians, keep a roof over the shop, and buy the expensive tool that programs the keys to the car. It is unreasonable to expect the programming to be done without charge, when the technician could be working on another paying job.

Key Parts

Please see the attached list of parts for the various keys. Prices are current as of US price lists July 2011. For current prices, check with your Saab Dealer or Independent Saab Specialist. Parts not listed as "NLS" should be still available.

Compiled by Larry West

August 19, 2009 – first edition
December 28, 2009 – Added Note 2
July 11, 2011 – added paragraph about "TRANSPONDR"
and "REMOTE KEY", Part # chart
July 16, 2011 – Added images of Remote Keys, transponder
and transponder key 1 head, general clean-up

		Model Years				Chassis#	Chassis#	Superseded		
Part	Application		Туре	Markets	Part#		to **	by part #	Price	Notes
Remote	9-5 & 9-3	1998-2000	Banana	EU, GB, LA, ME, PA, ZA		_		.,		
Remote	9-5 & 9-3	1998-2000	Banana	JP	47 11 974					
Remote	9-5 & 9-3	1998-2000	Banana	AU, CA, US	47 11 966				\$ 141.45	
Key Head (w/chip)	9-5	1998-2000	Transponder 1	LHD, US, CA	47 14 804		-X3003557		\$ 38.33	
Key (Cut)	9-5 & 9-3	1998-2000	Transponder 1	LHD, US, CA	45 53 988		-X3003557			State Key Code/VIN
Key Blank	9-5 & 9-3	1998-2000	Transponder 1	LHD, US, CA	48 51 762		-X3003557		\$ 18.33	
, Key Head (w/chip)	9-5	1998-2000	Transponder 2	LHD, US, CA	50 40 613	X3003558-			\$ 41.67	
Key (Cut)	9-5	1998-2000	Transponder 2	LHD, US, CA	48 53 883	X3003558-				State Key Code/VIN
Key Blank	9-5	1998-2000	Transponder 2	LHD, US, CA	54 44 646	X3003558-				,
Key Head (w/chip)	9-5	1998-2000	Transponder 2	,, -	50 40 613				\$ 41.67	
Key (Cut)	9-5	1998-2000	Transponder 2		48 53 883				-	State Key Code/VIN
Key Blank	9-5	1998-2000	Transponder 2		54 44 646					,
,			,				22001875,			
							23001386,			
Cover	9-5 & 9-3	2001-2003	Remote Key 1		51 17 148 (NLS)		27002015	51 89 659		
			·			22001876,				
							End of 9-3,			
Cover	9-5 & 9-3	2001-2003	Remote Key 1		51 89 659		33026906			
			· · · · · · · · · · · · · · · · · · ·				End of 9-3,			
Cover	9-5 & 9-3	2001-2003	Remote Key 1	AU, CA, US	51 84 114		33026906		\$ 14.35	
			· · · · · · · · · · · · · · · · · · ·	-, - ,			End of 9-3,			
Key (Cut)	9-5 & 9-3	2001-2003	Remote Key 1		51 84 502		33026906		\$ 35.38	State Key Code/VIN
, , ,			,				End of 9-3,			,
Key Blank	9-5 & 9-3	2001-2003	Remote Key 1		51 83 025 (NLS)		33026906	30584617	\$ 28.00	
•			,				End of 9-3,			
Key Blank	9-5 & 9-3	2001-2003	Remote Key 1		30584617		33026906		\$ 35.00	
Cover	9-5	2003-2010	Remote Key 2		55 10 219	33026907-				
Cover	9-5	2003-2010	Remote Key 2	AU, CA, US	55 10 201	33026907-			\$ 5.63	
Key (Cut)	9-5	2003-2010	Remote Key 2		55 10 144	33026907-			\$ 40.00	State Key Code/VIN
Key Blank	9-5	2003-2010	Remote Key 2		53 63 015	33026907-			\$ 35.00	
Transmitter (aka 'Guts') 9-5 & 9-3	2001-2010	Remote Key 1&2		52 65 327				\$ 100.00	
Transmitter (aka 'Guts') 9-5 & 9-3	2001-2010	Remote Key 1&2	JP	52 65 343					
Transmitter (aka 'Guts') 9-5 & 9-3	2001-2010	Remote Key 1&2	AU, CA, US	52 65 335				\$ 130.18	
Key with Transmitter	9-5 & 9-3	-2003	Remote Key 1 (Complete)		400 128 898					State Key Code/VIN
Key with Transmitter	9-5 & 9-3	-2003	Remote Key 1 (Complete)		400 128 906					State Key Code/VIN
Key with Transmitter	9-5 & 9-3	-2003	Remote Key 1 (Complete)	JP. KR	400 128 914					State Key Code/VIN
Key with Transmitter	9-5	2003-2010	Remote Key 2 (Complete)	NOT US, CA, AU, JP, CR	400 133 435	33026907-				State Key Code/VIN
Key with Transmitter	9-5	2003-2010	Remote Key 2 (Complete)	AU, CA, US	400 133 419	33026907-				State Key Code/VIN
Key with Transmitter	9-5	2003-2010	Remote Key 2 (Complete)	JP. KR	400 133 427	33026907-				State Key Code/VIN
TWICE	9-3	All			52 65 806				\$ 890.73	All 9-3 TWICE Modules supersede to this PN
TWICE	9-5	All			12767179					All 9-5 TWICE Modules supersede to this PN

^{*} The banana remote, both Transponder Keys and Remote Key 1 will work properly in any 9-3, and 9-5s up to Chassis # 33026906. Remote Key 2 only works in 9-5s starting with Chassis Number 33026907.

^{**} The "Chassis Nmber" is the last 8 digits of the VIN, compeising the year code, the line code, and the serial number.