

Supplemental Restraint System (SRS)

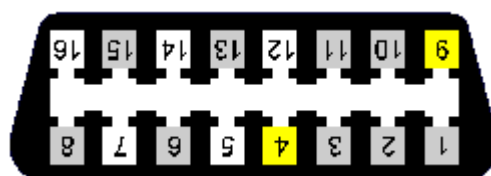
My 2003 Civic LX Coupe had an intermittent SRS indicator light right after I bought it. I found the SRS code being thrown was 9-3. This translates to a faulty driver's seat belt buckle switch. Honda's lifetime seat belt warranty covered the repair. The following describes what I did to diagnose this. I paid a few dollars total for the parts I used.

To Read SRS Codes

1. Make sure the ignition switch is OFF. Wait at least 10 seconds after turning the ignition switch to OFF; this is important.
2. Locate the 16P Data Link Connector (a.k.a. OBD II connector). On my 2003 Civic LX coupe, it is mounted in the driver's footwell, a little inboard and below where the driver's right knee would be. You do not have to remove any covers to get to this connector. See below. Note the gas pedal in the lower left of the photo. The connector already has the jumper in place for the next step.



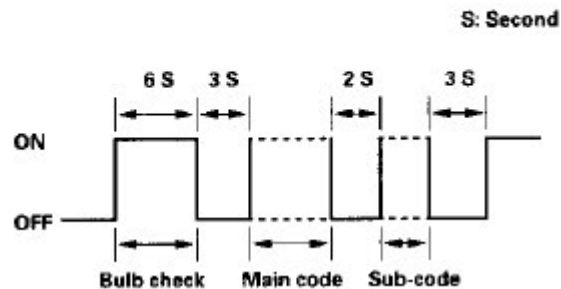
3. Jumper pins 4 and 9 of the Data Link Connector. See the photo above and the picture below. (Image courtesy of k-series.com)



4. Turn the ignition switch ON (II). The SRS indicator light comes on for about 6 seconds (performing a "bulb check") and then goes off. Then the light will flash the code.
5. Watch the light, counting flashes and estimating their duration, and read the code using the following:

Patterns of DTC Indications:

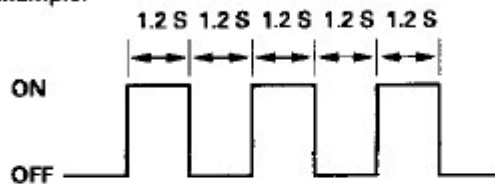
The DTC consists of a main code and sub-code.



Reading the main code:

In case of 1 ~ 10
Count the number of blinks.

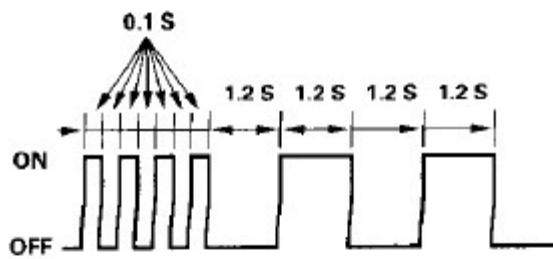
Example:



Main code= 1 + 1 + 1 = 3

In case of 11 ~ 15
Four fast blinks count as 10.
Add any further blinks together as shown.

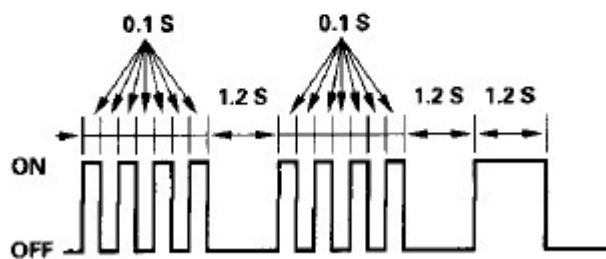
Example:



Main code= 10 + 1 + 1 = 12

In case of 20 or more
Two sets of four continuous blinks count as 20.
Add any further blinks together as shown.

Example:

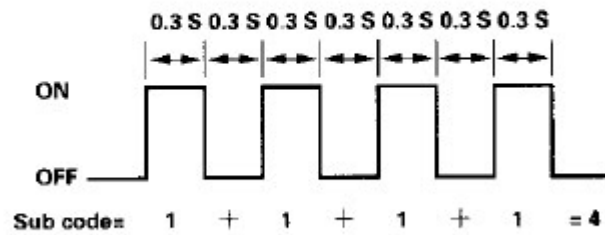


Main code= 10 + 10 + 1 = 21

Reading the sub code:

Count the number of blinks.

Example:



If the main code is '3', and the sub code is '4', record a DTC 3-4.

6. If the system is normal, no codes will be flashed, and the SRS light will come back on and stay on.
7. Turn the ignition switch OFF. Wait 10 seconds. Then remove the jumper. To identify the problem area, see the list of codes below.

Homemade SCS Short Connector Tool

The shop manual states one may use an OEM tool called an "SCS short connector" to re-set the SRS system. Re-setting the SRS system is also known as "erasing the Diagnostic Trouble Code (DTC) memory." I made my own SCS short connector as follows:

1. From an already torn up junkyard Honda wire harness, get two roughly 1-foot long 18-22 gage wires with one male pin at the end of each wire. It does not matter what is at the other end of each wire.
2. Get a two-pin toggle switch from Radio Shack. This was under \$4 in 2009. See below.

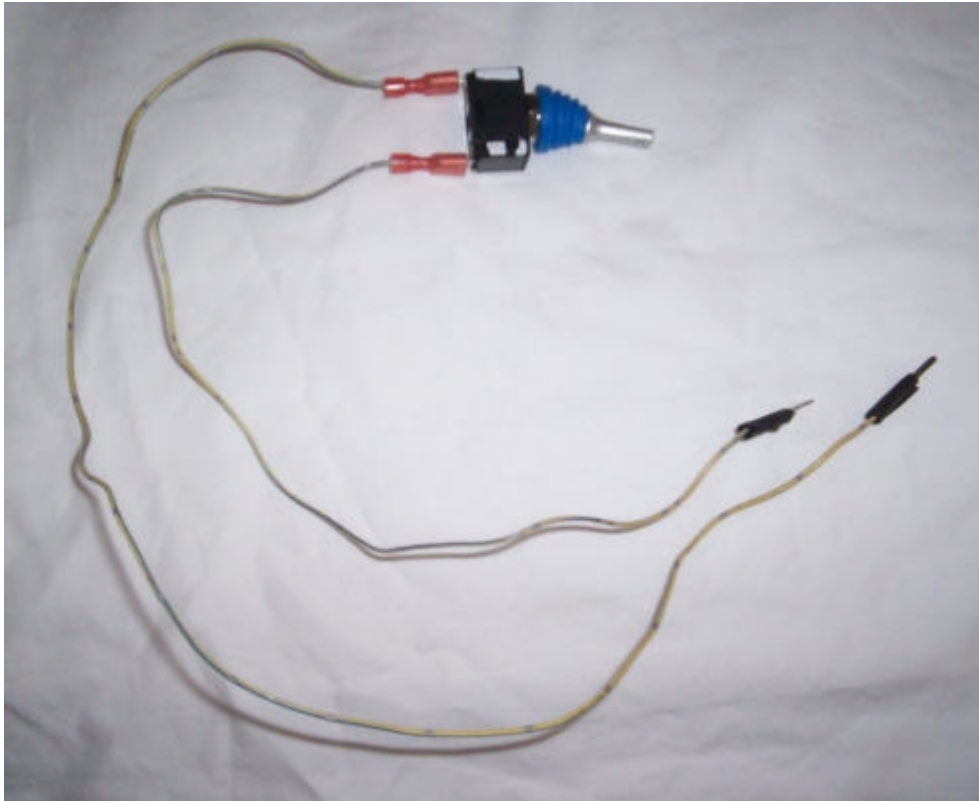


3. Get two female "Quick Disconnects" also from Radio Shack that can attach to the two pins on the toggle switch. See below.



4. Use a multimeter to note the positions of the toggle switch that open and close the circuit. Mark the toggle switch accordingly.

5. Strip about 1/4-inch from the non-pin end of each wire. Insert the stripped ends into the quick disconnects and crimp. Attach the quick disconnects to the toggle switch.
6. Wrap black electrical tape around the male pins so as to keep them from coming into electrical contact when inserted into the Memory Erase Signal (MES) connector. Here is the completed tool:



7. Insert the two male pins into the MES connector as needed to re-set the SRS system, per the instructions below.

To Re-Set the SRS System (a.k.a. Erase the DTC Memory)

1. Make sure the ignition switch is OFF.
2. Go beneath the steering wheel and remove the cover over the lower dash and fuse box.
3. Disconnect the yellow 2P MES connector from the fuse box. Note that the MES connector blanks out at the fuse box; it does not connect electrically to anything when plugged into the fuse box.
4. Connect the homemade SCS short connector tool to the MES connector.
5. Close the toggle switch. Turn the ignition switch to ON (II).
6. The SRS light will come on for about 6 seconds and then go off. Open the toggle switch within 4 seconds after the light goes off. The SRS light will come on again. Close the toggle switch within 4 seconds of the light coming on. When the SRS light goes off again, open the toggle switch.
7. The SRS light will blink two times quickly. Turn the ignition switch to OFF. Wait 10 seconds (waiting the 10 seconds is important). Remove the tool.

After identifying that Code 9-3 was being thrown and learning this meant that the seat belt buckle switch had failed, I wondered whether this might be covered under Honda's lifetime seat belt warranty. To find out, I reported to my local Honda dealer. My dealer reads codes for free, but subsequent repairs may not be. My dealer was great: The service department read the code, assured me the repair was covered under warranty, and ordered the part. When the part arrived we made an appointment. Less than two days after first reporting to my dealer, I was driving home with the new seat belt buckle installed. I asked to keep the old buckle (for tinkering), but the dealer said they needed to turn it over to Honda as part of the warranty procedure. For the interested reader, the buckle part number is 04816-S5D-A12ZD. A new buckle costs \$145 + shipping and handling as of 2009 at places like bkhondaparts.com. Counting labor I estimate Honda pays around \$200 to make this repair for its customers.

Aside: One of the Service Department fellows said his understanding is that this seat belt buckle switch wears *by design*. He said Honda wants Code 9-3 to be thrown periodically [every several years?] so people come in to get a new seat belt buckle. This is supposed to help preserve the integrity of the seat belt as a restraint and so save Honda from lawsuits. I do not know if this is true or not. I remember having an issue with my 1991 Civic's seat belt in 2001 or so. The dealer fixed it without question. It was an expensive repair, labor-wise. From these experiences it seems to me that the lifetime seat belt warranty is something Honda holds sacred.

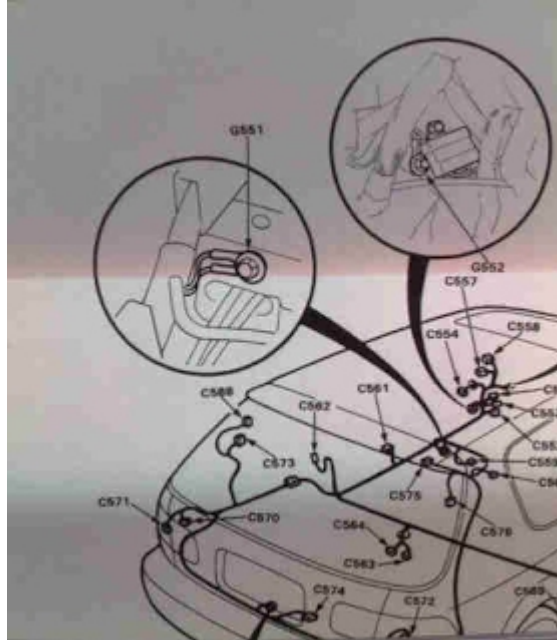
For those not handy and unable to read the code, here are some symptoms that might help you recognize that 9-3 is likely the code being thrown: The last time I got the code, I had started the car with my seat belt undone. I saw the SRS light come on and stay on. Curiously the seat belt indicator light was off. I fastened my belt and started driving. I momentarily unfastened my belt, and the seat belt light came on, as it is supposed to. But I think the fact that the seat belt light was originally off when it should have been on is a clue that 9-3 is the code being thrown.

After I re-set the SRS memory and so cleared the light, I tried to turn it on again by wiggling the seat belt buckle. This did indeed turn on the SRS light.

Once, when the SRS light went on, it went off a day later.

Intermittent codes come up a lot here and at other Honda fora. I did find in the shop manual a procedure for "troubleshooting intermittent failures" of the SRS system. It reads as though these are going to happen from time to time (because the SRS electronics are so sensitive?), so the owner should be equipped to deal with them. While researching my 2003 Civic's intermittent light, I also found that 2001-02 Civics may throw Code 9-3 because of a faulty ground at point G551. See Honda's January 2002 "Service News," linked at

<http://www.tegger.com/hondafaq/p0420/A020100.pdf>. To repair this problem, remove the driver's seat, pull up the door sill a little, pull up the carpet a few inches, and look on top of the brace to which the front seat front brackets bolt. See the picture below. Clean and torque the connection to spec as needed.



A number of official Honda publications, such as Technical Service Bulletins and Recalls, discuss known SRS problems for different Honda models. The web has many reports on these. You can also try your public library computers' automotive reference center to look these up.

Codes

Page numbers below refer to the shop manual I have.

SRS DTC Troubleshooting Index 23-40

NEC (M2), DENSO (M1) SRS unit (Without Side [Airbag](#) Model)

DTC Detection Item Notes

1-1 Open in driver's airbag inflator (see page 23-55)

1-2 Increased resistance in driver's airbag inflator (see page 23-55)

1-3 Short to another wire or decreased resistance in driver's airbag inflator (page 23-57)

1-4 Short to [power](#) in driver's airbag inflator (see page 23-59)

1-5 Short to ground in driver's airbag inflator (see page 23-61)

2-1 Open in front passenger's airbag inflator (see page 23-63)

2-2 Increased resistance in front passenger's airbag inflator (see page 23-63)

2-3 Short to another wire or decreased resistance in fr passenger's airbag inflator (23-64)

2-4 Short to power in front passenger's airbag inflator (see page 23-66)

2-5 Short to ground in front passenger's airbag inflator (see page 23-67)

3-1 Open in left side seat belt tensioner (see page 23-69)

3-2 Increased resistance in left side seat belt tensioner (see page 23-69)

3-3 Short to another wire or decreased resistance in left side seat belt tensioner (23-71)

3-4 Short to power in left side seat belt tensioner (see page 23-73)

3-5 Short to ground in left side seat belt tensioner (see page 23-75)

4-1 Open in right side seat belt tensioner (see page 23-77)

4-2 Increased resistance in right side seat belt tensioner (see page 23-77)

4-3 Short to another wire or decreased resistance in left side seat belt tensioner (23-79)

4-4 Short to power in left side seat belt tensioner (see page 23-81)

4-5 Short to ground in left side seat belt tensioner (see page 23-83)

5- Internal failure of SRS unit (see page 23-85)

6- Internal failure of SRS unit (see page 23-85)

7- Internal failure of SRS unit (see page 23-85)

8- Internal failure of SRS unit (see page 23-85)

9-1

Internal failure of the SRS unit. If intermittent, could mean internal failure of the unit or a

faulty indicator light circuit. Refer to Troubleshooting Intermittent Failures (see page 23-38). Otherwise see page 23-85.

9-2

Internal failure of the SRS unit. If intermittent, could mean internal failure of the power supply (VB line). Refer to Troubleshooting Intermittent Failures (see page 23-38). Otherwise see page 23-85.

9-3 Faulty driver's seat belt buckle switch [pretty common]

9-6 Faulty left front sensor (see page 23-88)

9-7 Faulty right front sensor (see page 23-91)

10-1 Seat belt tensioners (and airbag(s)) deployed (see page 23-85)

NOTE:

Before troubleshooting DTCs 5-1 through 8-6, check battery/system voltage. If voltage is low, repair the charging system before troubleshooting the SRS system.

See also <http://forums.clubrsx.com/showthread.php?t=636707>