

How to disable 2015 LEAF VSP

WARNING: I am not a mechanic, nor a photographer.

VSP is the NISSAN acronym for approaching Vehicle Sound for Pedestrians.

VSP makes a loud beeping sound when in reverse.

VSP makes a whining noise when going from 0 to 20mph and 20 to 0mph.

VSP makes musical noises when you push the POWER button.

My opinion is that VSP means Vehicle Sound Pollution.

Almost every NISSAN dealer says VSP is a safety feature and it can't be turned off.

GOOGLE found a 2014 LEAF manual for me and according to DRIVER CONTROLS, SECTION VSP, page VSP-10, 2014 LEAF had a VSP OFF switch on the instrument lower panel LH and when this VSP OFF switch was turned off, a VSP OFF warning light would turn on (see page VSP-11).

Our 2015 LEAF does not have this VSP OFF switch, but it still has the VSP OFF indicator light (which remained unlit until I removed our VSP speaker).

VSP has 2 main components:
1- a VSP control module (computer) &
2- a VSP speaker.

There is probably a smart phone app to turn off the VSP, but I don't know how to do that.

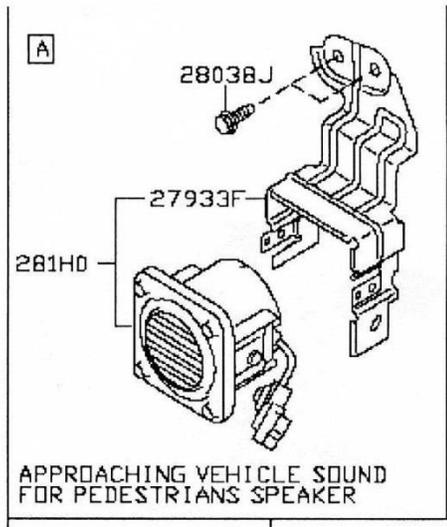
I do know that you can turn off the VSP by either:
[A] removing the VSP control module or
[B] removing the VSP speaker

To remove the VSP control module (that is plugged in next to the letter "E"), you must remove the glove box (page VSP-67), which didn't appeal to me.

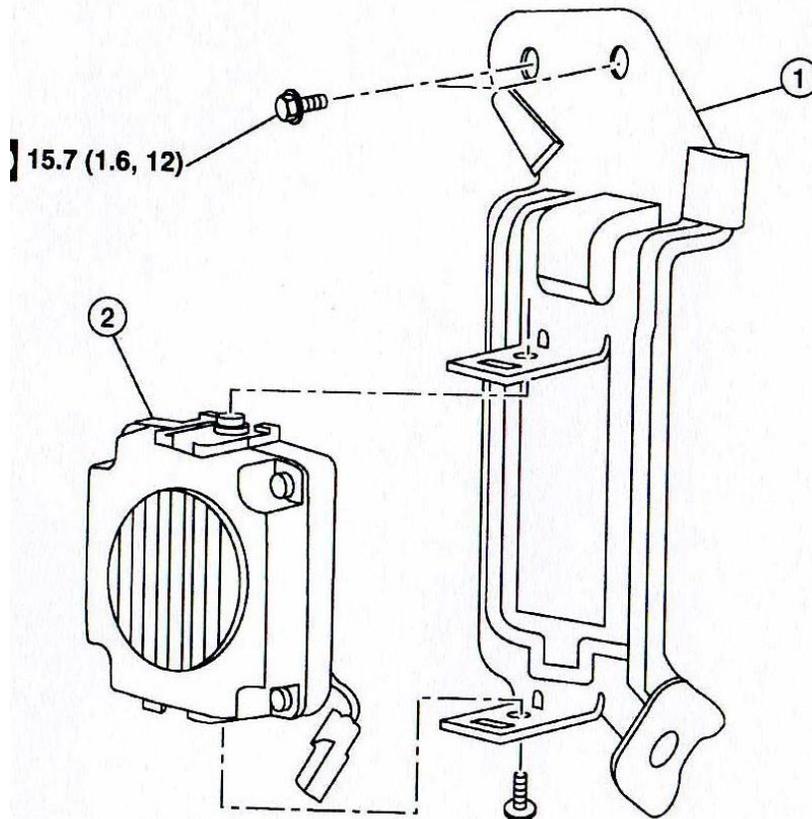
I chose to simply remove the VSP speaker.

So, what does a VSP speaker look like?

I went to a Nissan dealer and asked to look at a VSP speaker, (so I could look at it, analyze the connector, and see the mounting bolts), they did not have one in stock, but they printed a picture of it for me:

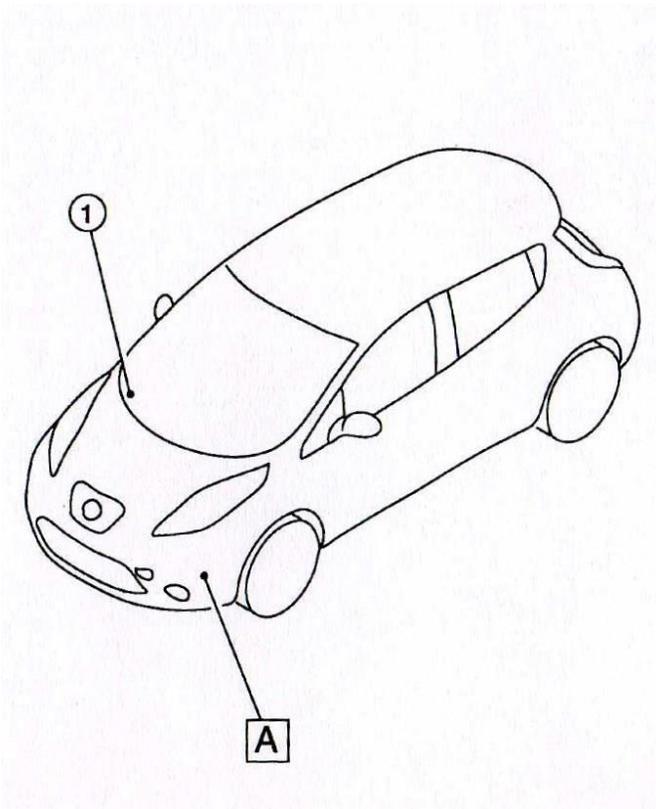


So, I now had a good idea of what the VSP speaker looks like. Page VSP-8, diagram "A" is a less than accurate view of the VSP speaker (and a bad depiction of its location). Page VSP-9, diagram is a little better. Page VSP-69, diagram is excellent:

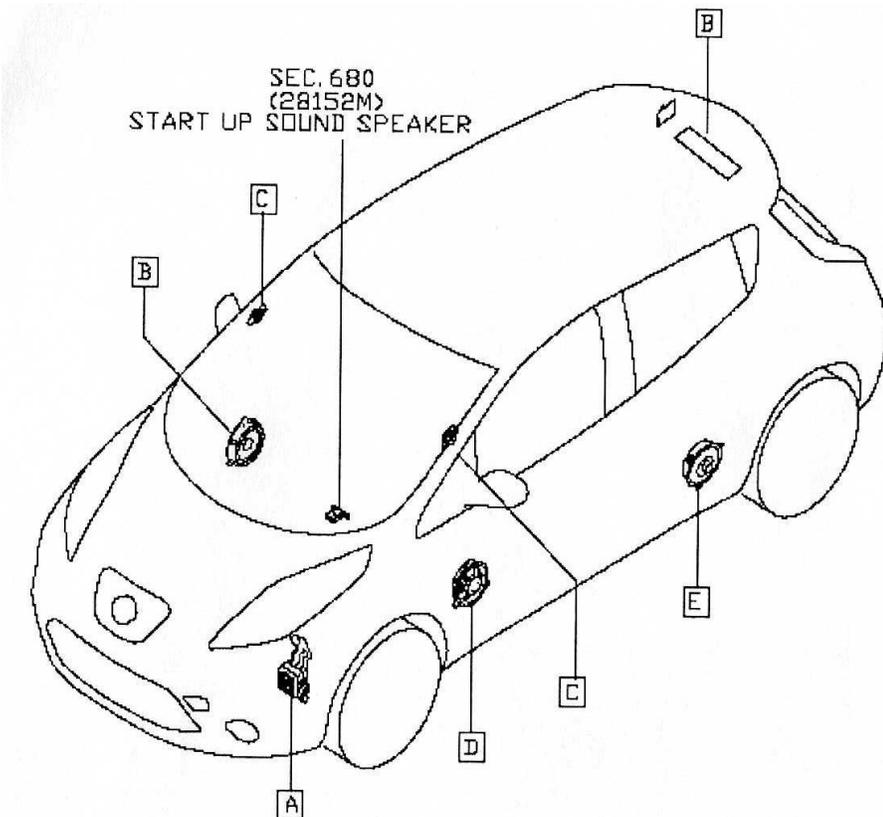


So, where is the VSP speaker located?

Page VSP-8 has a good diagram of the general location [A] of the VSP speaker:



Also, the picture printed by the Nissan dealer is very good, see location [A]:



OK, we now know where to look for the VSP speaker.

Page VSP-69 states "Remove the front bumper."

That may indeed be the easiest way to get to the VSP speaker, but I chose to leave the bumper on.

I looked under the car and could not find any access to the VSP speaker.

So I decided to see if it was accessible from inside the "engine" compartment.



You need to go to the driver's door.



Open the driver's door.



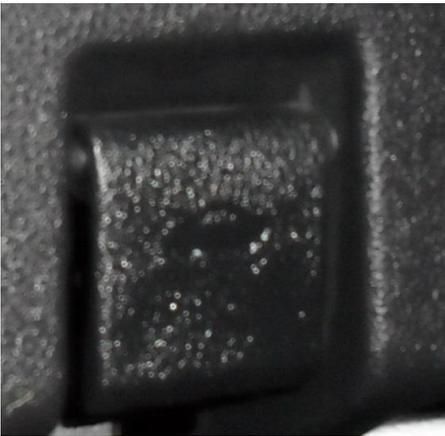
Look to the left of the steering wheel and down.



Look down under those switches.



This is the hood release lever. Can you see the icon of a car with the hood up?



Pull it toward you.

You should have heard a little pop when the hood released.

Now go back to the front of the car.

Notice that the hood is up about one inch.

The hood is still secure with a safety latch

(to prevent your hood from popping up while driving,
which would block your vision, break your hood, and ruin your day).

The safety latch is under the hood in the front center of the hood.

You can't see the safety latch yet,

but this is what it looks like (in the squeezed position).



To release the safety latch, position your palm up, reach into the one inch gap, feel around for the little tab of the safety latch.



Squeeze up the tab, lift the hood two or more inches.



Release the tab, lift the hood up high and hold it there with your left hand. Now, locate the hood support rod that is snapped into a holder on the right.



Using your right hand, grip the right end of the hood support rod, position your right elbow up high, and pull toward your elbow so that the rod pops out of the holder.



Now, swing your right hand down toward the “engine” compartment, and look for the hood support hole and insert the end of the hood support rod.



Ensure that the hood support rod is securely in the correct hole.



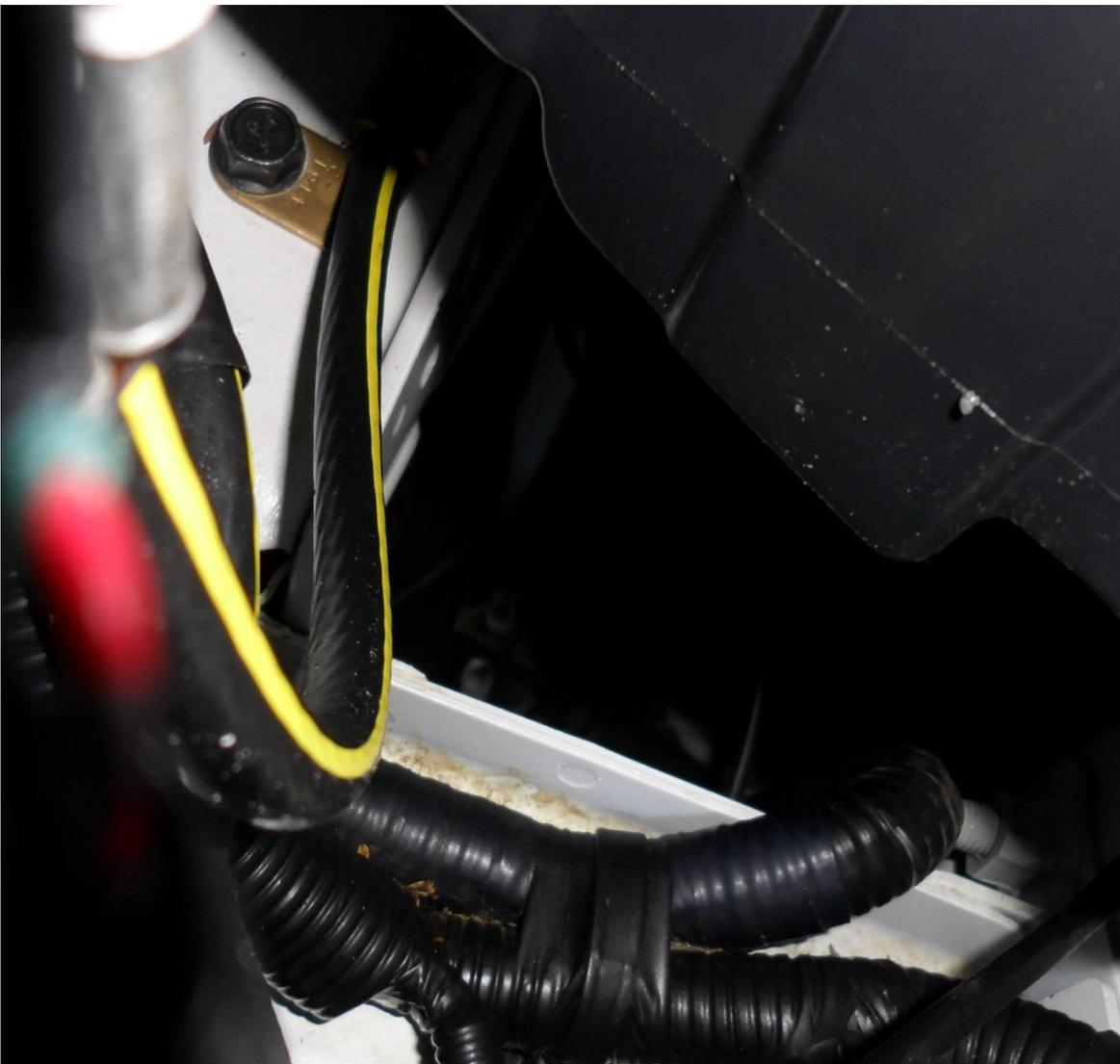
Now, double check the hood support rod and look to your right, locate the little 12v battery, which is near the left front wheel well.



Zoom in.



Zoom in even more, do you see that black hole in the center of the picture?
The VSP speaker is way down in that hole.



This VSP speaker is difficult to get to, so to get a little extra “elbow room”, use a 10mm box wrench to carefully,

DON'T LET THE WRENCH TOUCH THE BATTERY TERMINAL !

loosen the two 12v battery hold down clamp nuts about 4 revolutions.



Just enough to slide the battery to your left, and then retighten those two nuts. That didn't help much, but you need all the space you can get.

Now, visualize and orient yourself according to the previous pictures of the VSP speaker location and slowly insert your hand down into the hole and feel around for this.



This is the VSP speaker and its mounting bracket.
Under them and out of sight are the wire connector and 2 wires.
Before you put any tools into this deep black hole,
remember that if you drop the wrench,
it won't fall through onto the ground like it would in your old FORD
because the bottom of the LEAF is like a flat bottom boat.
However, a 12 inch flexible part pick up device can reach to the bottom
and retrieve your wrench.
You could also tie a long string on your wrench.
The plan is to remove the mounting bracket and VSP speaker as one unit.
Using a 13mm "box" (don't use "open end") wrench,
feel around until you feel the head of the bolt that is nearest to the fender
and orient your box wrench to the head of the bolt,
then turn the bolt head counter clockwise several revolutions.
When you can turn the bolt with your fingers,
remove the wrench, use your fingers to loosen the bolt.
DON'T DROP THE BOLT!
Carefully loosen the bolt with your fingers and remove the bolt from the hole.

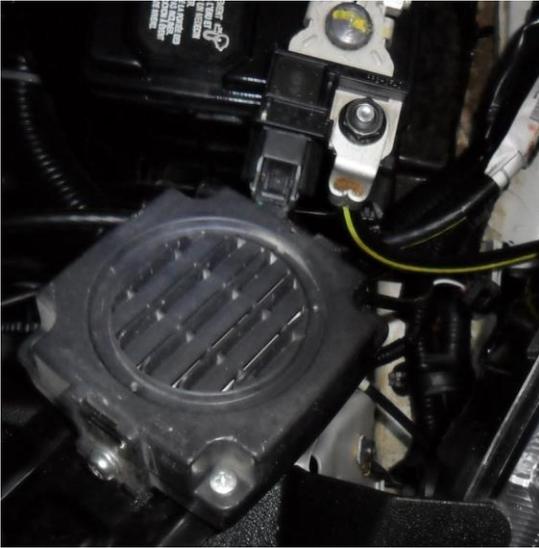
That was the easy bolt.

Don't start the second bolt until you read this:

When you remove the second bolt, you need to
**BE EXTRA CAREFUL NOT TO DROP THE BOLT
NOR THE VSP SPEAKER AND MOUNTING BRACKET!**
If you have to drop something, drop the bolt.
If you drop the VSP speaker and mounting bracket,
it will be difficult to retrieve them.

OK, now, repeat the procedure for the second bolt that is nearest the 12v battery.
Move slowly.
When you are done with the wrench,
slowly use your fingers to hold onto the VSP speaker
and mounting bracket as you turn the bolt.
When the bolt is out, bring out the VSP speaker and mounting bracket
and if you can also handle it, the bolt.

Because there is a double wire connected to the underside of the VSP speaker, the wires will prevent you from going very far with the VSP speaker, so just secure the VSP speaker near the top of the hole.



Now, locate the black plastic tubing with a black wire and a white wire inside, and secure them with an alligator clip on a long string (so that when you cut the wires they won't fall down into that hole).

Approach with insulated handle wire cutter
(without touching 12v battery terminal):



Now, cut the two wires.



and catch the two pieces of black tubing litter (so they don't fall down into the hole).



Securely wrap the ends of the black & white wires coming up from the hole with small wire nuts and lots of black electrical tape.

Now, we test.

Remove VSP speaker, mounting bracket, bolts, and all tools from the engine compartment.

Close the hood.

Push the POWER button.

1- You should hear less music & beeping at startup.

2- Notice that the VSP OFF indicator light is lit.

3- Check the mirrors, keep foot on the brake, move selector to Reverse, monitor the backup camera and all mirrors,

WATCH FOR PEDESTRIANS, and remember that that safety device is OFF.

Slowly release brake and listen to the peaceful silence when backing up.

4- Stop and move selector to Drive,

And drive without artificial whine when going from 0 mph to 20 mph.

5- Slow down and hear no artificial whine when going from 20 mph to 0 mph.

6- Congratulate yourself. You are helping to make your neighborhood quieter.