## ACURA

## ServiceNews Article

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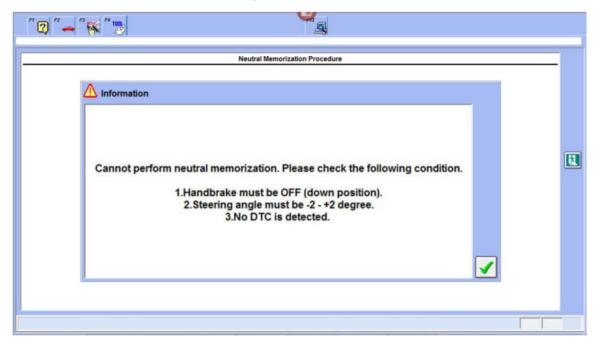
## **Neutral Memorization Procedure Won't Complete?**

## AFFECTED VEHICLES

Year	Model	Trim
2013-19	ILX	ALL
2013-19	ILX Hybrid	ALL
2014-19	MDX	ALL
2017-19	NSX	ALL
2013-18	RDX	ALL
2014-19	RLX	ALL
2014-19	RLX Sport Hybrid	ALL
2015-20	TLX	ALL

EDITOR'S NOTE: This article replaces "VSA Neutral Memorization Won't Complete," posted in January 2015.

When removing and installing a cable reel, you need to keep both the cable reel and the steering angle sensor in position. If you don't, the VSA indicator may come on along with one or more VSA DTCs. And when you run the **Neutral Memorization Procedure** in the i-HDS, it won't complete.



By the way, this procedure is covered as VSA Sensor Neutral Position Memorization in the service information.

To keep those parts properly positioned, here's a tip: First, make sure the front wheels are pointed straight ahead with the steering wheel in the straight-ahead position. Then, before removing the cable reel, tape both the cable reel and steering angle sensor together. This not only keeps the parts properly positioned, but keeps the sensor from accidently moving.



But what if for some reason the sensor moves? If so, you'll need to manually adjust it. It's an easy process that uses the i-HDS, but keep in mind it's not included in the service information.

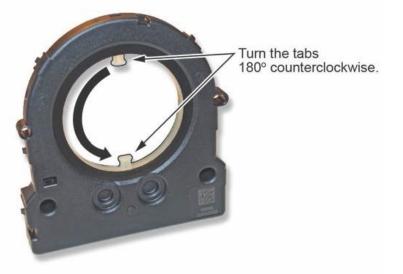
To better understand it, let's take a quick look at steering angle sensor operation. When you turn the steering wheel to the **right** (or the sensor **clockwise**), the reading **increases** or moves in a **positive** direction. When you turn it to the **left** (or the sensor **counterclockwise**), the reading **decreases** or moves in a **negative** direction.

To manually position the steering angle sensor, you first need to determine its current position with the i-HDS. How you do that depends on how far along you are with your repair.

For instance, if you've completely assembled the steering column, you'll need to go to the **ABS/TCS/VSA Data List** and check the **STEERING ANGLE (CAN)** value. If you haven't yet installed the steering angle sensor, you'll need to at least hook up the sensor, the cable reel, and either the airbag assembly or the applicable simulator tool, then read the sensor value in the data list.

SFI	RYD4H41EB00300	55 HONDA AB	5 14 23 01 36 82 57114-TZ6-A130
Signel	Value	Units	ABPA_43_01
RIGHT REAR INLET SOLENOID ACTIVATION COMMAND STATUS	OFF		
IGHT REAR OUTLET SOLENOID ACTIVATION COMMAND STATUS	OFF	- <u>*</u> -1	STEERING ANGLE (CAN)
C5	OPEN		(*)
ARKING BRAKE	ON		
BS INDICATOR	OFF		[Description]
SA/TCS INDICATOR	OFF	-	Steering Angle Sensor Value input from CAN
SA/TCS ACTIVE LIGHT	OFF		oreening Angle Sensor value input from CAN
RAKE INDICATOR	OFF	<u> </u>	[NOTE]
ATERAL ACCELERATION SENSOR STATUS	Normal		and the
ATERAL ACCELERATION SENSOR	0.00	G	The steering angle when the ignition switch is turned on is determined as 0".
ONGITUDINAL ACCELERATION SENSOR STATUS	Normal		After driving, 0° of the steering angle is determined by the straight ahead
ONGITUDINAL ACCELERATION SENSOR	0.00	G	position. +: Right Turn
AW RATE SENSOR STATUS	Normal		-Left Turn
AW RATE SENSOR	0	*/s	-Lon rom
TEERING ANGLE (CAN)	180	100	
NGINE SPEED	0	RPM	
HIBIT FLAG STATUS FROM PCM	Normal		
T SHIFT POSITION	P		
EFT FRONT TC'S NORMALLY CLOSE SOLENOID	OFF	•	
EFT FRONT TC'S NORMALLY OPEN SOLENOID	OFF	•	
IGHT FRONT TC'S NORMALLY CLOSE SOLENOID	OFF	•	
IGHT FRONT TC'S NORMALLY OPEN SOLENOID	OFF	•	
BRAKE FLUID LEVEL	ENOUGH		
/SA OFF SWITCH	OFF		
NGINE TORQUE	151.0	N-m	
REQUEST ENGINE TOROUE	NOT	N-m *	

In this example, the **STEERING ANGLE (CAN**) value is reading a **positive 180°**, which tells you the steering angle sensor is **180°** out of position **clockwise**. To fix this, you'll need to remove the sensor from the cable reel and turn the two tabs **180° counterclockwise** to bring the sensor back to center or **0°**.



When you're done, you'll then need to install all of the removed components and repeat the Neutral Memorization Procedure. If you've done the sensor adjustment right, the procedure should complete and you can then move on with your repair.

For a look at this manual adjustment in action, be sure to check out the *Tech2Tech®* video "Manually Adjusting the Steering Angle Sensor."