



# RECALL CAMPAIGN BULLETIN

Classification:	Reference:	Date:
BR18-010	NTB18-087	December 19, 2018

## VOLUNTARY SAFETY RECALL CAMPAIGN 2009 MURANO; BRAKE FLUSH

**CAMPAIGN ID #:** R1814  
**APPLIED VEHICLES:** 2009 Murano (Z51)

**Check Service COMM or Dealer Business Systems (DBS)  
National Service History to confirm campaign eligibility.**

### INTRODUCTION

Nissan is conducting this Voluntary Safety Recall Campaign on certain specific model year 2009 Murano vehicles to remove the DOT 3 brake fluid from the brake system and replace it with new DOT 4 brake fluid. In rare instances, the ABS actuator and electronic control unit (ABS actuator) may need to be replaced. This service will be performed at no charge to the customer for parts or labor.

### IDENTIFICATION NUMBER

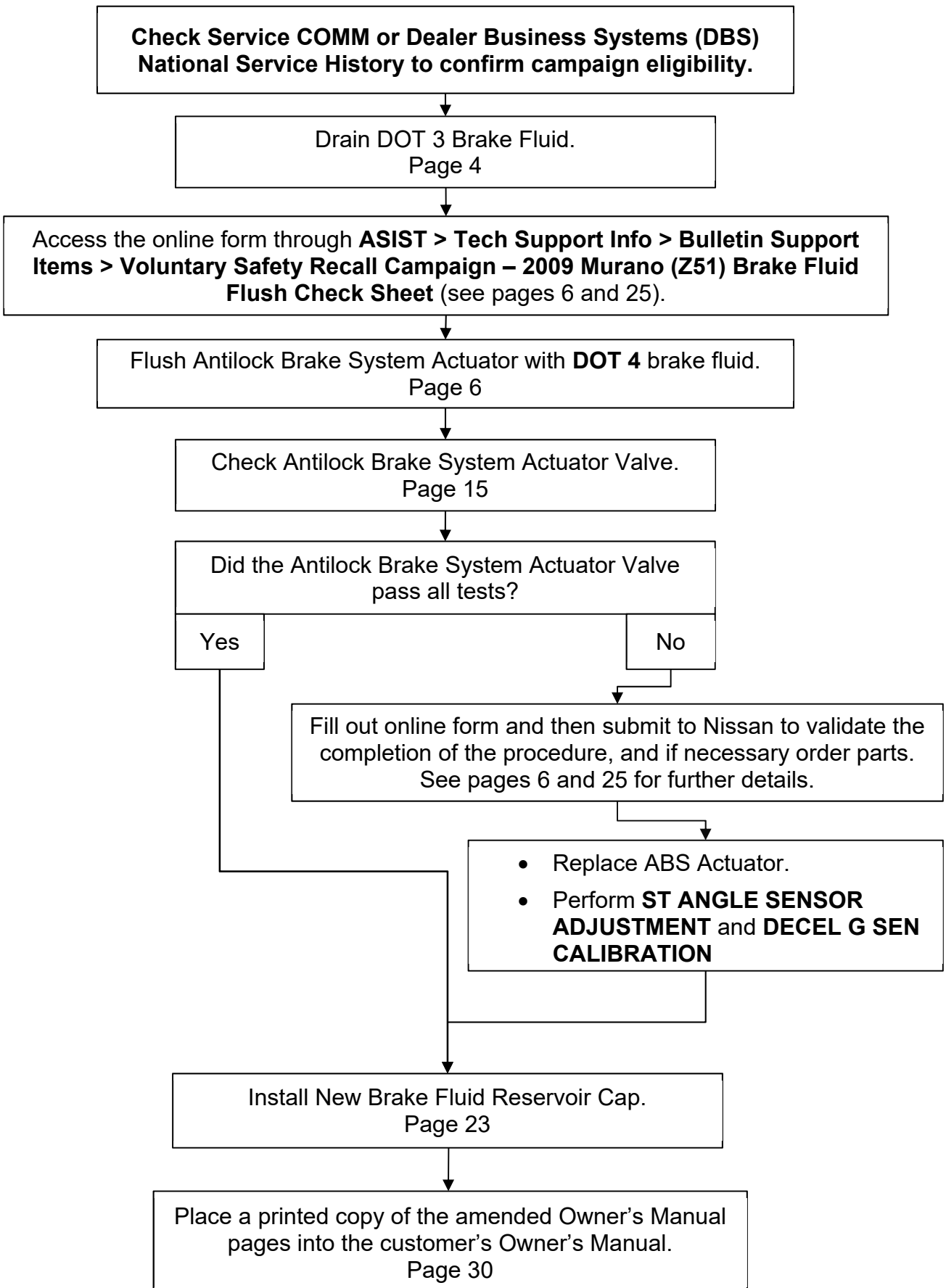
Nissan has assigned identification number R1814 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

### DEALER RESPONSIBILITY

It is the dealer's responsibility to check Service COMM or Dealer Business Systems (DBS) National Service History for the campaign status on each vehicle falling within the range of this voluntary safety recall which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory. **Federal law requires that new vehicles in dealer inventory which are the subject of a safety recall must be corrected prior to sale. Failure to do so can result in civil penalties by the National Highway Traffic Safety Administration.** While federal law applies only to new vehicles, Nissan strongly encourages dealers to correct any used vehicles in their inventory before they are retailed.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

## Flow Chart



## SERVICE PROCEDURE

**IMPORTANT:** Any deviation from this procedure is not allowed, including the use of any brake fluid other than the **DOT 4** shown in Figure A.

The following Service Procedure uses an online form that must be filled out while performing the procedure (see page 25 for further details). When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection, and to order parts if necessary.

- If you are connected to WiFi you may access the form through **ASIST > Tech Support Info > Bulletin Support Items > Voluntary Safety Recall Campaign – 2009 Murano (Z51) Brake Fluid Flush Check Sheet**.
- If you are not connected to WiFi at this time, use a printed copy of **ONLINE FORM/AUTO PARTS ORDERING PROCESS**, and transfer the information to a WiFi connected ASIST PC (see page 25), after the procedure has been completed.
- Before starting, make sure:
  - ASIST on the CONSULT PC has been synchronized (updated) to the current date.
  - All CONSULT-III plus (C-III plus) software updates (if any) have been installed.



Figure A

1. Place the vehicle on a lift.
2. Open the hood and place clean fender covers on the fenders.
3. Raise the vehicle up to a comfortable height, and then remove all 4 wheels.
4. Apply Nissan rust penetrant (or equivalent) to all of the brake caliper bleeder fittings (see Parts Information).

**IMPORTANT:** Allow rust penetrant to soak for at least ten (10) minutes before attempting to loosen bleeder fittings.

5. Lower the vehicle so that you can enter the driver's door.

### DOT 3 Brake Fluid Drain

#### CAUTION:

- In the following steps, **DO NOT** use a power bleeder of any type to bleed the brake fluid.
- Never spill or splash brake fluid on painted surfaces. Brake fluid may seriously damage paint. Wash with water if it gets on a painted surface.
- Keep water away from open brake hydraulic system components.

**IMPORTANT:** Monitor the level in the brake fluid reservoir while performing step 6. Do not allow it to go below the minimum (MIN) line.

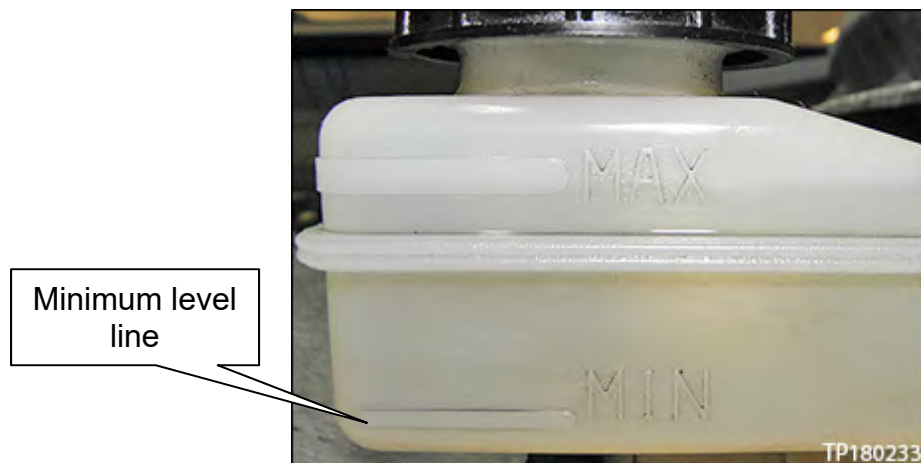


Figure 1

6. Drain the brake fluid from brake fluid reservoir as follows:
  - a. Connect a vinyl tube to the bleeder valve of the right front brake caliper.
  - b. Loosen the right front caliper bleeder valve.
  - c. Slowly and repeatedly depress the brake pedal until the brake fluid drops to the minimum level mark of the brake fluid reservoir.
  - d. Tighten the bleeder valve.
  - e. Refill the brake fluid reservoir with **DOT 4** brake fluid to the maximum level mark.
  - f. Connect a vinyl tube to the bleeder valve of the left front brake caliper.
  - g. Loosen the left front caliper bleeder valve.
  - h. Repeatedly depress the brake pedal until the brake fluid drops to the minimum level mark of the brake fluid reservoir.
  - i. Tighten the bleeder valve.
  
7. Refill the brake fluid reservoir with **DOT 4** brake fluid to the maximum level mark.

## Antilock Brake System Actuator Flush

The following Service Procedure uses an online form that must be filled out while performing the procedure.

- The form can be accessed by selecting **ASIST > Tech Support Info > Bulletin Support Items > Voluntary Safety Recall Campaign – 2009 Murano (Z51) Brake Fluid Flush Check Sheet** (see Figure 2 and Figure 3).
  - Further details can be found on page **Error! Bookmark not defined..**
- When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection, and to order parts if necessary.
- If you are not connected to WiFi at this time, use a printed copy of **ONLINE FORM/AUTO PARTS ORDERING PROCESS**, and transfer the information to a WiFi connected ASIST PC (see page **Error! Bookmark not defined.**), after the procedure has been completed.

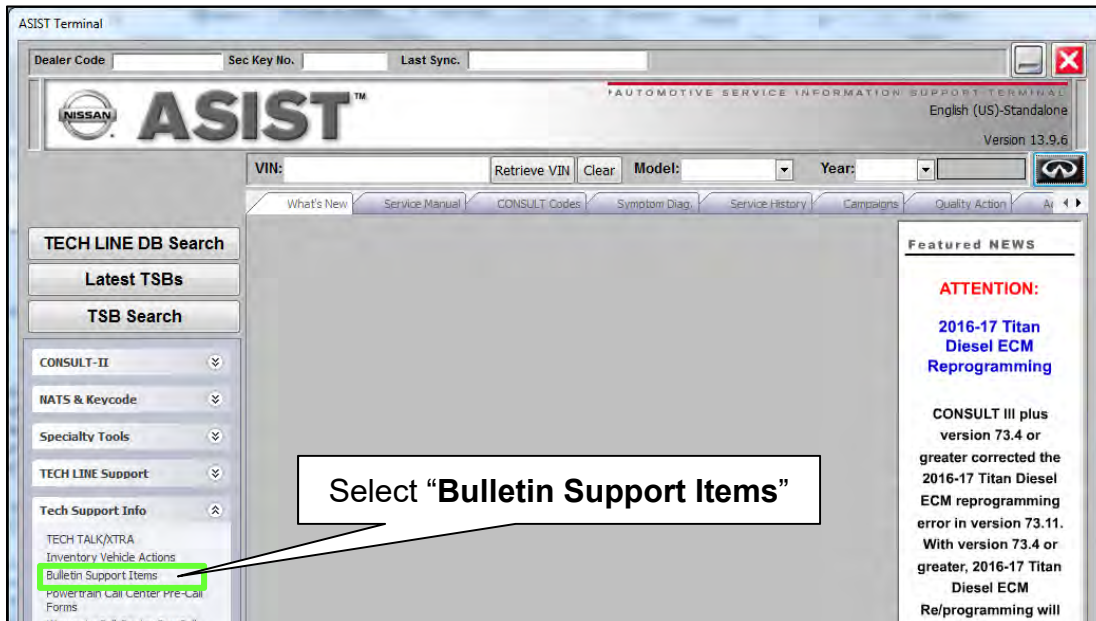


Figure 2

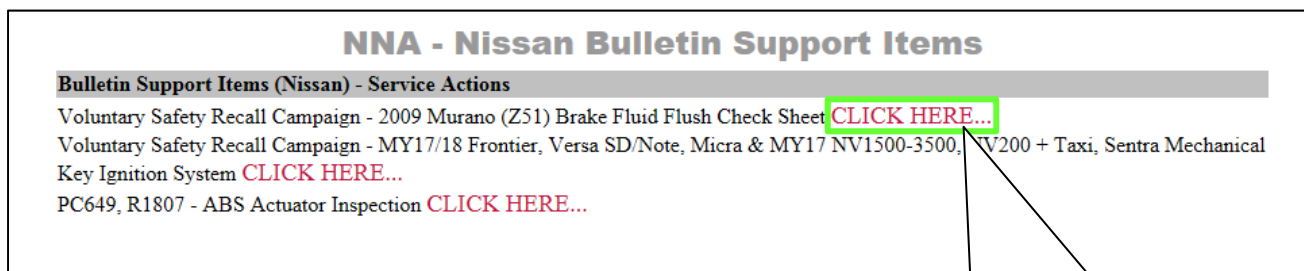


Figure 3

Select "Voluntary Safety Recall Campaign – 2009 Murano (Z51) Brake Fluid Flush Check Sheet"

**IMPORTANT: All of the following brake fluid bleed cycles must be completed to fully flush the brake system with DOT 4 brake fluid.**

**8. IMPORTANT: STOP and read steps 9-36 completely before proceeding.**

9. Connect the GR8 to the vehicle battery, set to “power supply” mode.

**NOTE:** Battery voltage must stay between 12 volts and 15.5 volts.

10. Turn the ignition ON, but do not start the engine.

11. Connect the CONSULT PC to the vehicle.

12. Open / start C-III plus.

13. Wait for the plus VI to be recognized.

- The serial number will display when the plus VI is recognized.

14. After the plus VI is recognized Select **Diagnosis (All Systems)**.

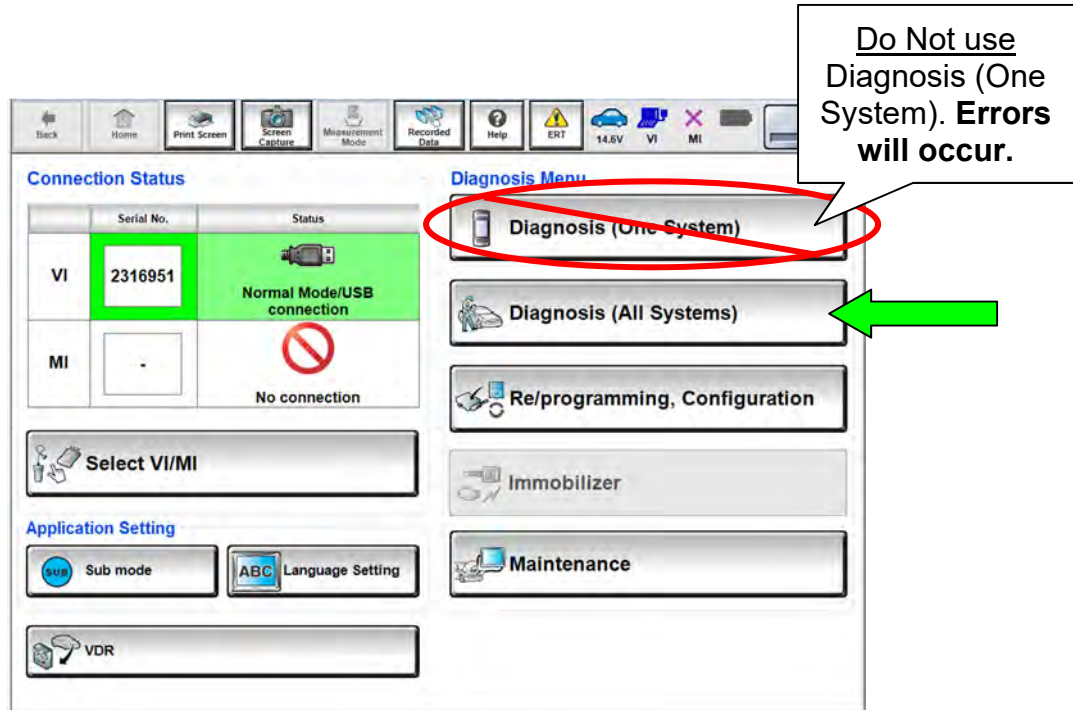


Figure 4

15. If the screen in Figure 5 displays, select **Automatic Selection(VIN)** and wait for the Reading VIN screen to complete.

- If the screen in Figure 5 does not display, skip to step 17.

16. Select **Select**.

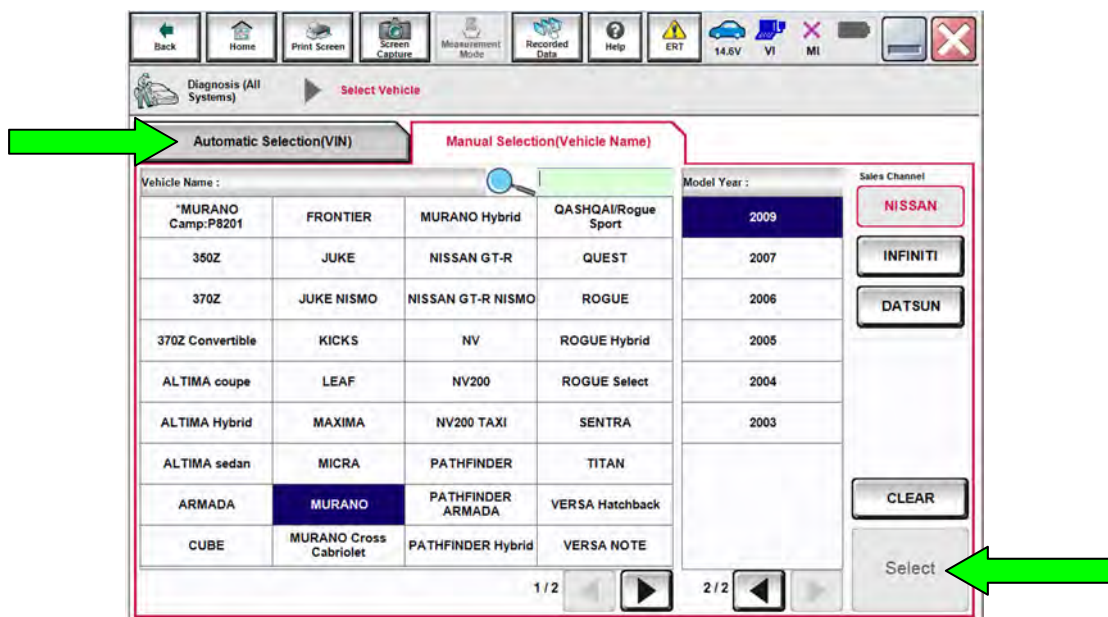


Figure 5



17. Verify the VIN in **VIN or Chassis #** matches that of the vehicle's.

- If the correct VIN exists, select **Confirm**.

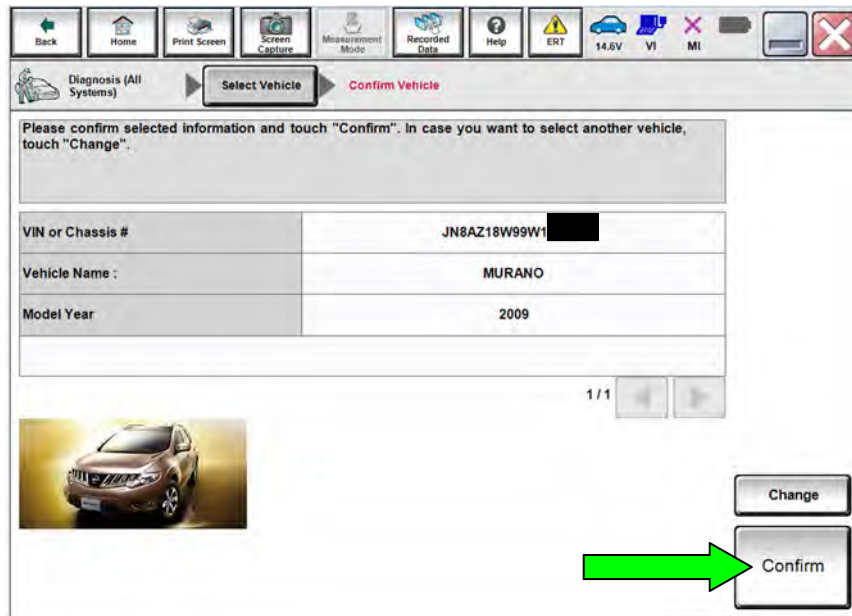


Figure 6

18. Select **ABS**.

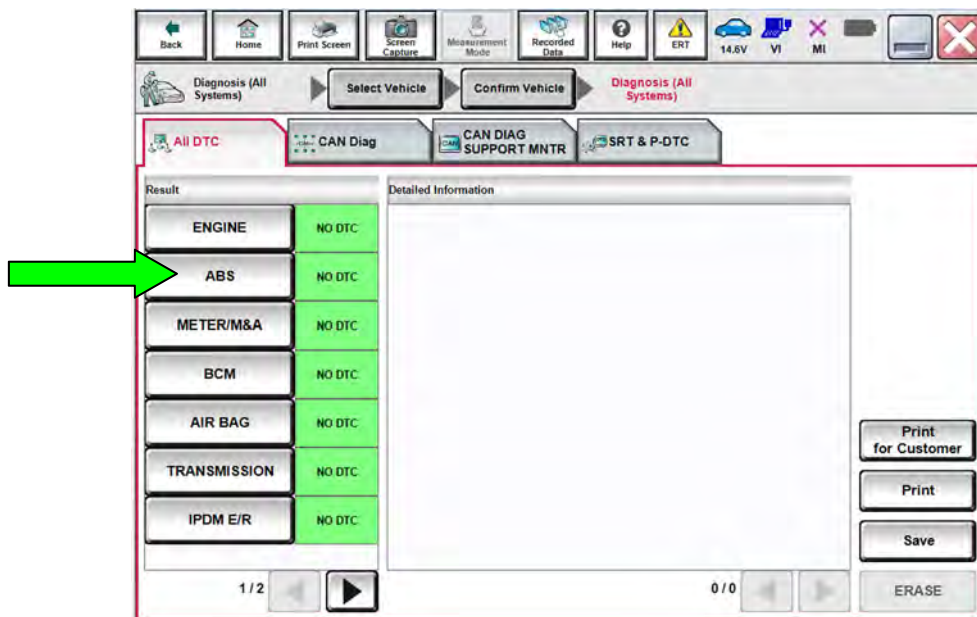


Figure 7

19. Select **Work Support**.

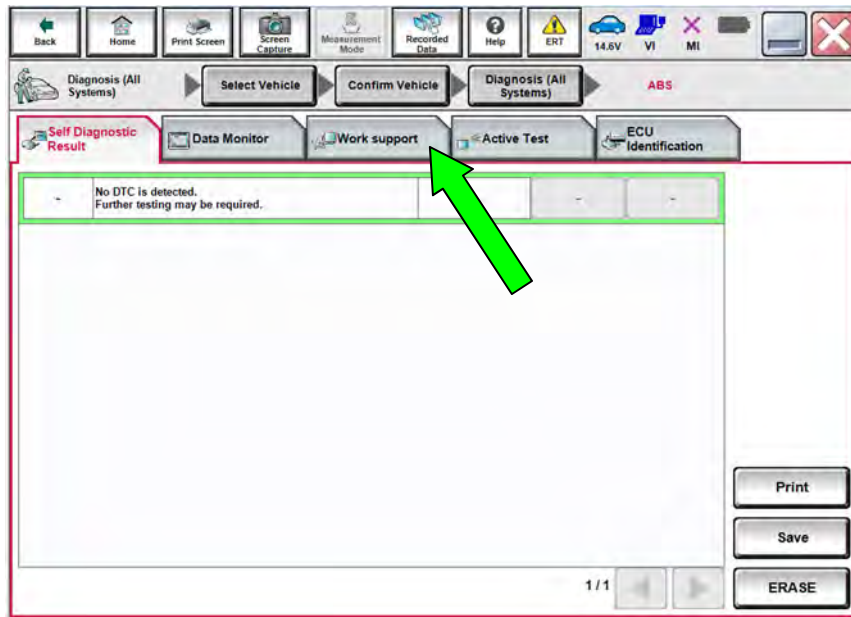


Figure 8

20. Select **Valve flushing**, and then select **Start**.

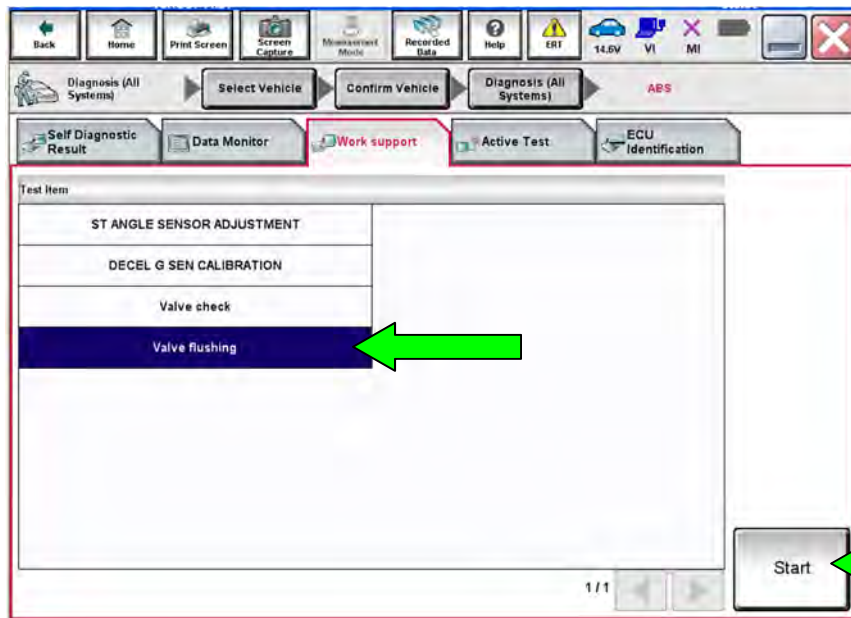


Figure 9

21. Press the brake pedal to raise the brake pressure to 21-39 bar (Figure 10).

**NOTE:** Monitor the brake pressure with C-III plus.

22. While maintaining 21-39 bar of brake pressure, select **Next** one (1) time.

- The brake pedal will drop after **Next** is selected. Do not release the brake pedal.

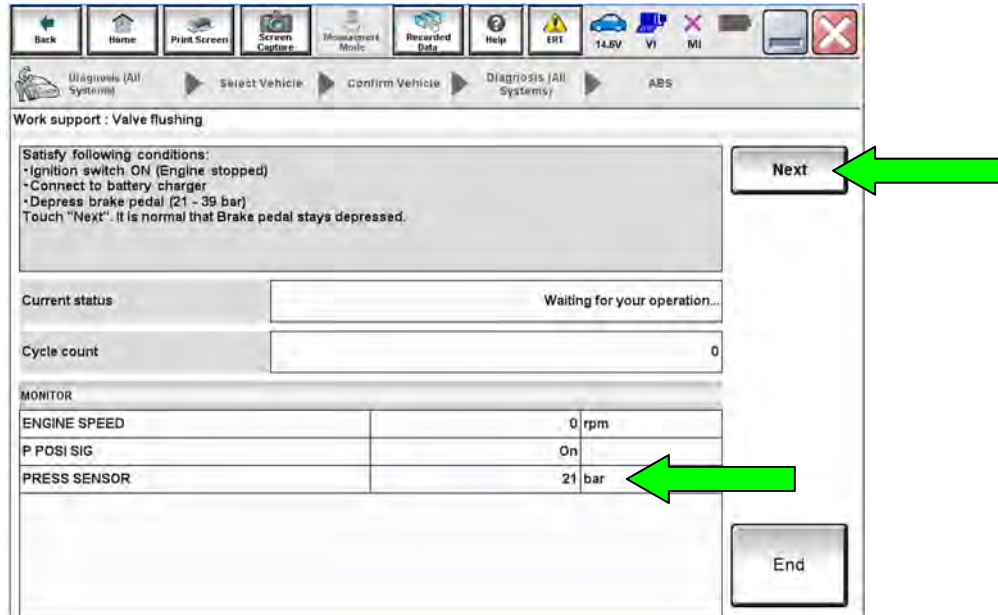


Figure 10

**IMPORTANT:** For the following steps:

- Brake pedal pressure must be at 21-39 bar during the entire valve check procedure.
  - If the pressure is outside this range, an error will occur as shown in Figure 11.
  - If this occurs, select **Next**, regulate brake pressure to 21-39 bar, and then restart test.
  - Only select **End** if C-III plus is no longer responding. This will restart the test from the beginning.

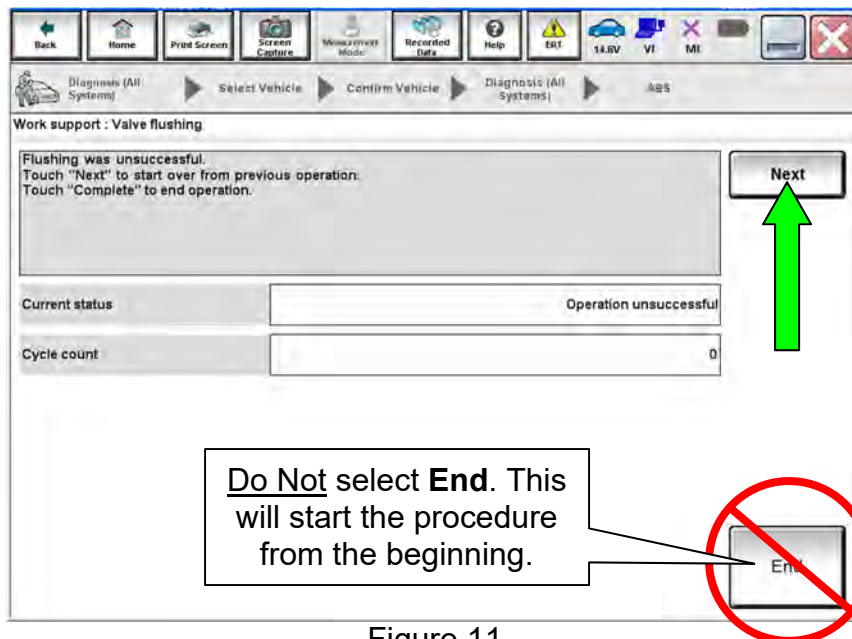


Figure 11

**IMPORTANT: In step 23 select Next ONLY one (1) time. Do Not select Next again until instructed to in step 25.**

23. While continuing to press the brake pedal, select **Next** one (1) time,

**And then**

- a. When an ABS motor buzz sound is heard, **RELEASE** the brake pedal. ("ABS motor operating" will be displayed on the screen. See Figure 13.)
  - The screen in Figure 14 will display after the operation has completed. **Do Not select Next again until instructed to.**

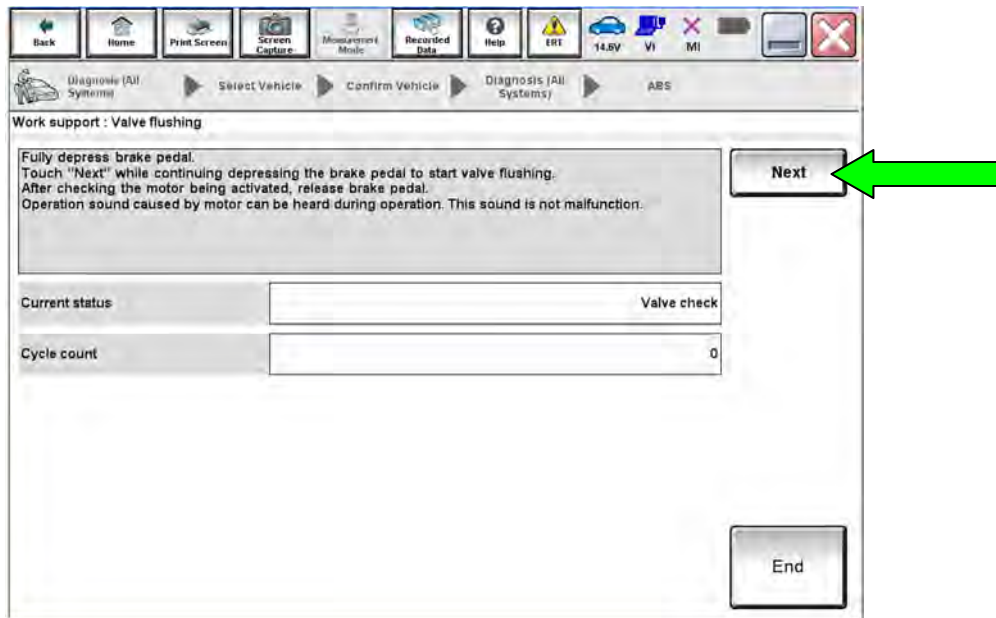


Figure 12

- After **Next** is selected (step 23), Figure 13 will be displayed with Current status of "ABS motor operating".
- This operation will continue for 30 seconds.



Figure 13

**CAUTION: In the following steps DO NOT use a power bleeder of any type to bleed or drain the brake fluid.**

24. Release some brake fluid from each brake caliper one time, as follows:

- All four (4) brake calipers must be bled once before selecting **Next**.
- Refill the brake fluid reservoir with **DOT 4** brake fluid as needed.

**IMPORTANT:** Do not allow the brake fluid reservoir to go below the minimum line.

- a. Connect a vinyl tube to the bleeder valve of the right rear brake caliper. Place the opposite end of the vinyl tube into a catch container.
- b. Fully depress the brake pedal one (1) time, and then hold light pressure.
- c. Loosen the bleeder valve, while the brake pedal is being depressed, to bleed (release) brake fluid, and then tighten the bleeder valve.
- d. Perform steps a through c to the left rear, right front and left front.
- e. Refill the brake fluid reservoir with **DOT 4** brake fluid to the maximum level mark.

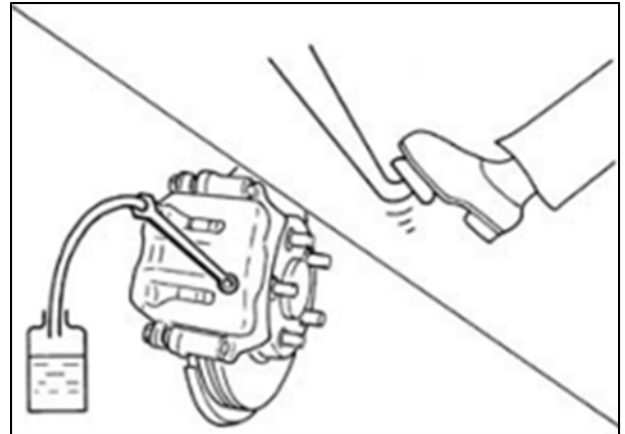


Figure B

25. Select **Next** to run valve flushing again.

**NOTE:** Steps 21-25 will be performed thirteen (13) more times in the next step.

**IMPORTANT:** Brake fluid bleed cycles must all be completed to fully replace the brake system with DOT 4.

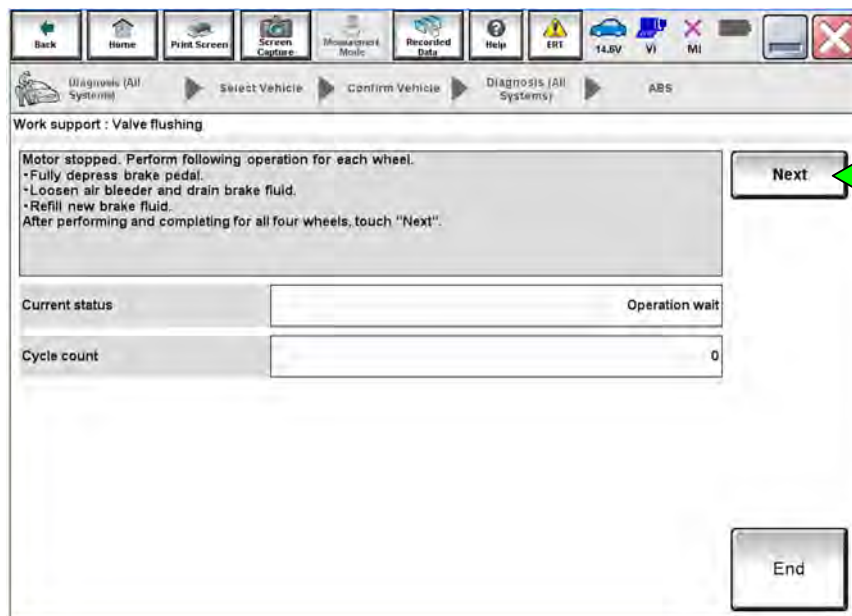


Figure 14

26. Repeat steps 21-25 thirteen (13) more times until Current status displays “Complete”, and then select **End**.

**IMPORTANT:**

- Do not select the “End” button until 14 is displayed in Cycle count.
- Cycle count must indicate 14 before Current status will display Complete.

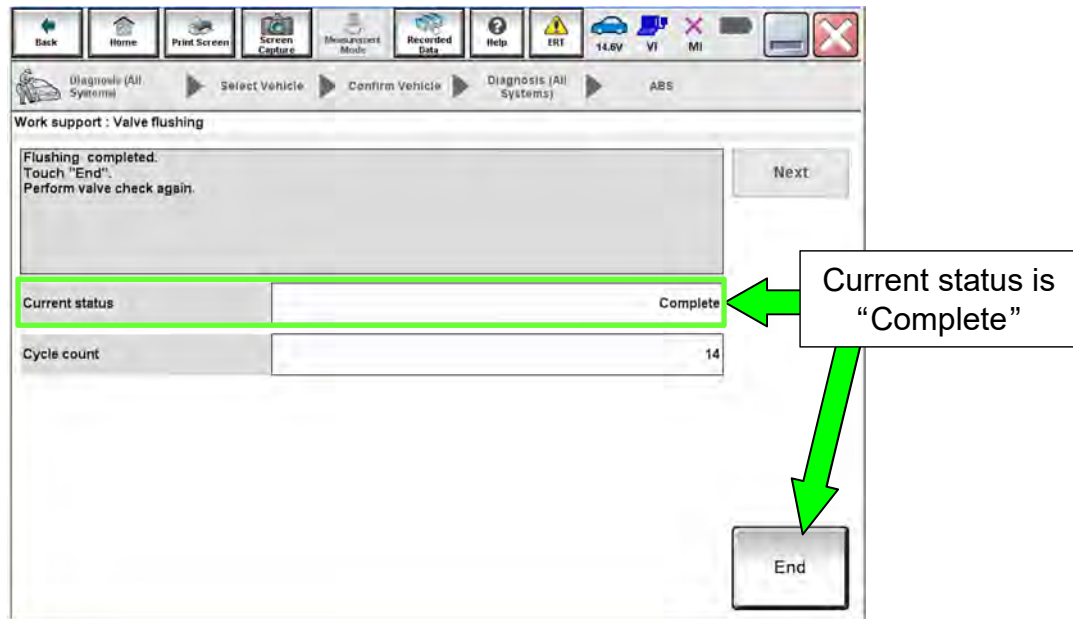


Figure 15

27. Remove the GR8 from the 12V battery.

## Antilock Brake System Actuator Valve Check Procedure

**NOTE:** During the following procedure, warning lights in the combination meter will illuminate and remain ON until the valve check procedure is completed; this is normal.

The following Service Procedure uses an online form that must be filled out while performing the procedure.

- The form can be accessed by selecting **ASIST > Tech Support Info > Bulletin Support Items > Voluntary Safety Recall Campaign – 2009 Murano (Z51) Brake Fluid Flush Check Sheet** (see page 6, Figure 2 and Figure 3).
  - Further details can be found on page 25.
- When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection, and to order parts if necessary.
- If you are not connected to WiFi at this time, use a printed copy of **ONLINE FORM/AUTO PARTS ORDERING PROCESS**, and transfer the information to a WiFi connected ASIST PC (see page **Error! Bookmark not defined.**), after the procedure has been completed.

The following steps will check all four anti-lock brake valves, and in the following order:

- **FR** – Front Right
- **FL** – Front Left
- **RR** – Rear Right
- **RL** – Rear Left

28. Start the engine.

29. Select **Valve Check**, and then select **Start**.

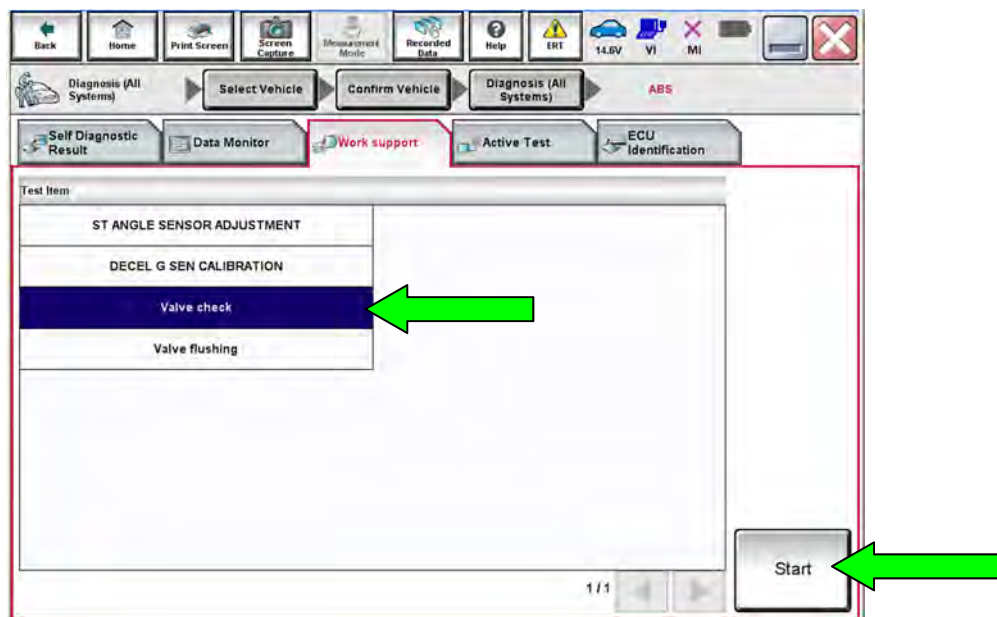


Figure 16

**IMPORTANT:** For the following steps:

- Brake pedal pressure must be at 21-39 bar during the entire valve check procedure.
  - If the pressure is outside this range, an error will occur as shown in Figure 17.
- If this occurs, select **Retry**, regulate brake pressure to 21-39 bar, and then restart the test.
- Only select **End** if C-III plus is no longer responding.

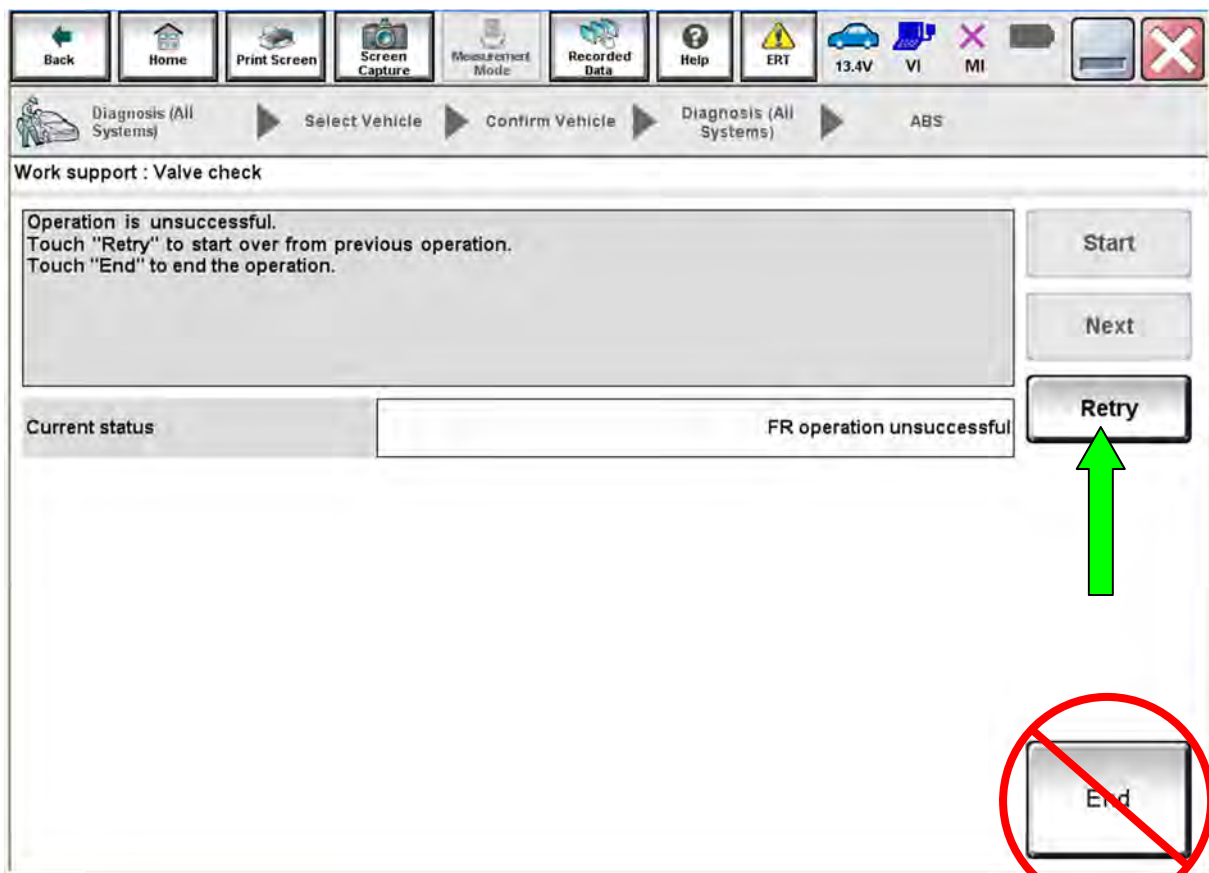


Figure 17

If End is selected, the procedure will start from the beginning.



30. Press the brake pedal **firmly** to raise the brake pressure to 21-39 bar.

- Monitor the brake pressure with C-III plus.

31. While maintaining 21-39 bar of brake pressure, select **Start** to check the first valve (FR valve).

**NOTE:** If the brake pressure is not within the specified range, the **Start** button cannot be selected.

- The valve will open right after **Start** is selected and the brake pedal should smoothly move down (pedal height drop).

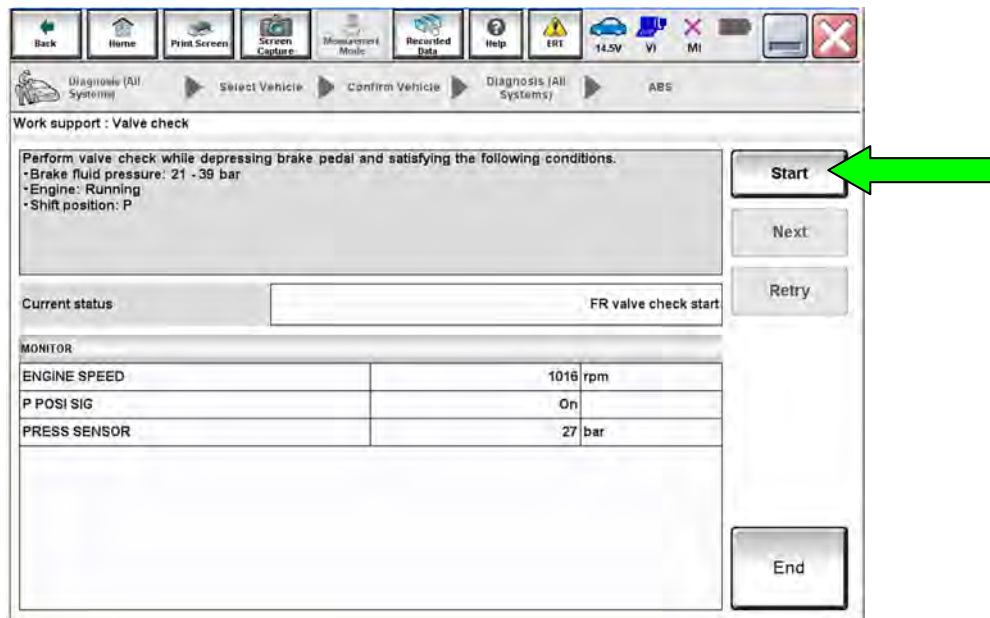


Figure 18

32. Did the brake pedal move down ↓?

- **YES:** Proceed to step 33 on page 19.
- **NO:** Proceed to the next page.

**Only perform the following if NO was the answer to step 32:**

- a. Select **End**.
- b. Turn the engine OFF.
- c. Submit the online form that was filled out while performing the service procedure to order parts (see page 25).
- d. Replace the ABS actuator.
  - Refer to the Electronic Service Manual (ESM), Section **BRC – Brake Control System**, for procedure to replace the ABS actuator.
  - **IMPORTANT:** Refill with **DOT 4** brake fluid ONLY.

e. Bleed the air from each brake circuit as follows:

- 1) Connect a vinyl tube to the bleeder valve of the right rear brake caliper. Place the opposite end of the vinyl tube into a catch container.
- 2) Fully depress the brake pedal 4 to 5 times, and then hold light pressure.
- 3) Loosen the bleeder valve, while the brake pedal is being depressed, to bleed air, and then tighten the bleeder valve.
- 4) Perform steps 1 through 3 to the left rear, right front and left front calipers until all air has been removed from the brake hydraulic system.
- 5) Refill the brake fluid reservoir with DOT 4 brake fluid to the maximum level mark.

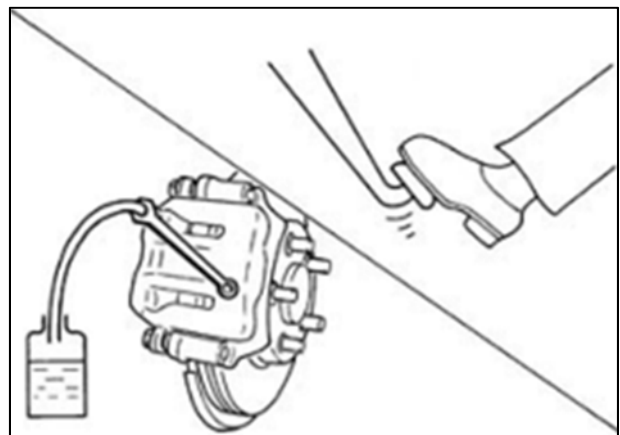


Figure C

- f. Perform **ST ANGLE SENSOR ADJUSTMENT** and **DECEL G SEN CALIBRATION**.
  - Follow C-III plus on screen instructions.
- g. Proceed to step 39.

### 33. Select **Next**.

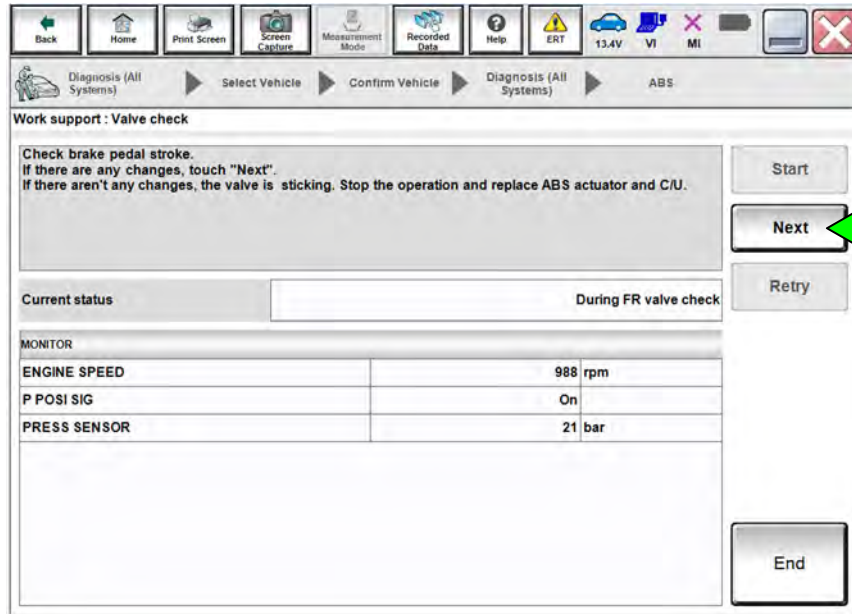


Figure 19

### 34. While maintaining 21-39 bar of brake pressure, select **Next** again.

- After Next is selected, the ABS pump motor will run/buzz and the brake pedal should forcibly move up (pedal height increases).

**NOTE:** Monitor the brake pressure with C-III plus.

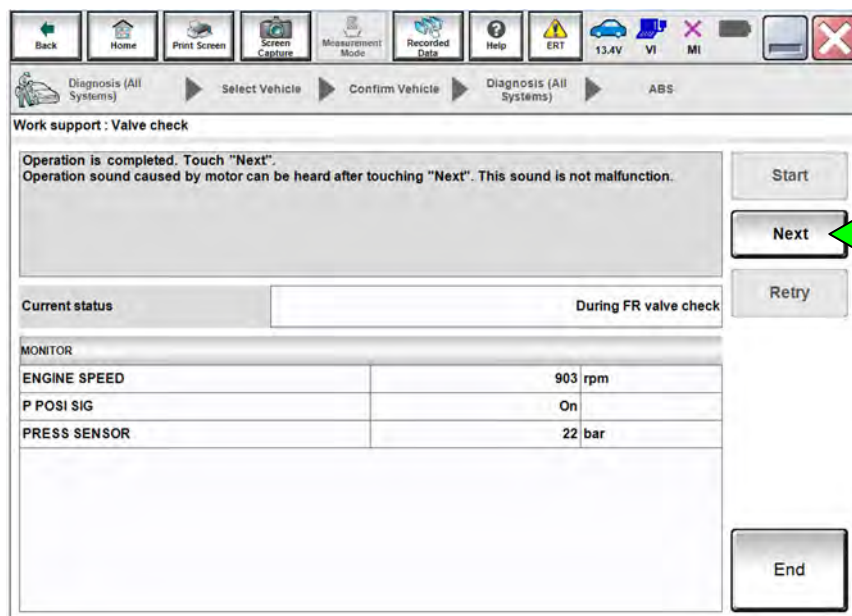


Figure 20

- After **Next** is selected, Figure 21 will be displayed with Current status of “ABS motor operating”.
- This operation continues for 20 seconds before the start button will be active again.

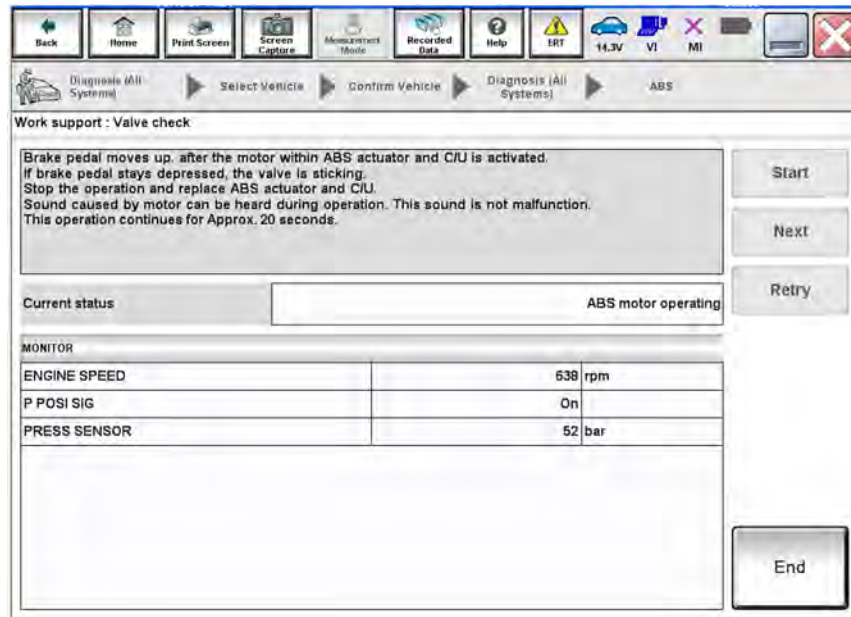


Figure 21

35. Did the brake pedal move up ↑?

**Record the results of this test on the ABS Check Sheet (page Error! Bookmark not defined.) to track progress.**

- **YES:** Proceed to step 36 on page 22.
- **NO:** Proceed to the next page.

**Only perform the following if NO was the answer to step 35:**

- a. Select **End**.
- b. Turn the engine OFF.
- c. Submit the online form that was filled out while performing the service procedure to order parts (see page **Error! Bookmark not defined.**).
- d. Replace the ABS actuator.
  - Refer to the Electronic Service Manual (ESM), Section **BRC – Brake Control System**, for procedure to replace the ABS actuator.
  - **IMPORTANT:** Refill with **DOT 4** brake fluid ONLY.

e. Bleed the air from each brake circuit as follows:

- 1) Connect a vinyl tube to the bleeder valve of the right rear brake caliper. Place the opposite end of the vinyl tube into a catch container.
- 2) Fully depress the brake pedal 4 to 5 times, and then hold light pressure.
- 3) Loosen the bleeder valve, while the brake pedal is being depressed, to bleed air and then tighten the bleeder valve.

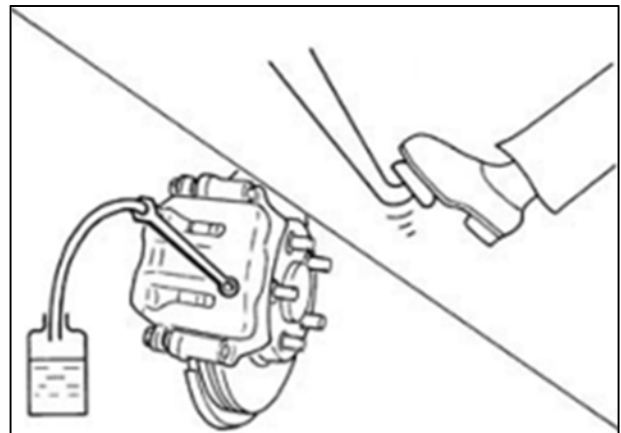


Figure D

- 4) Perform steps 1 through 3 to the left rear, right front and left front calipers until all air has been removed from the brake hydraulic system.
- 5) Refill the brake fluid reservoir with DOT 4 brake fluid to the maximum level mark.
- f. Perform **ST ANGLE SENSOR ADJUSTMENT** and **DECEL G SEN CALIBRATION**.
  - Follow C-III plus on screen instructions.
- g. Proceed to step 39.

36. Perform steps 30 through 35 on the FL, RR and RL valves and then proceed to the next step.

**NOTE:** When steps 30 to 35 have been completed for all four wheels (FR, FL, RR and RL), current status on the C-III plus screen will display “Complete”.

37. Select **End**.

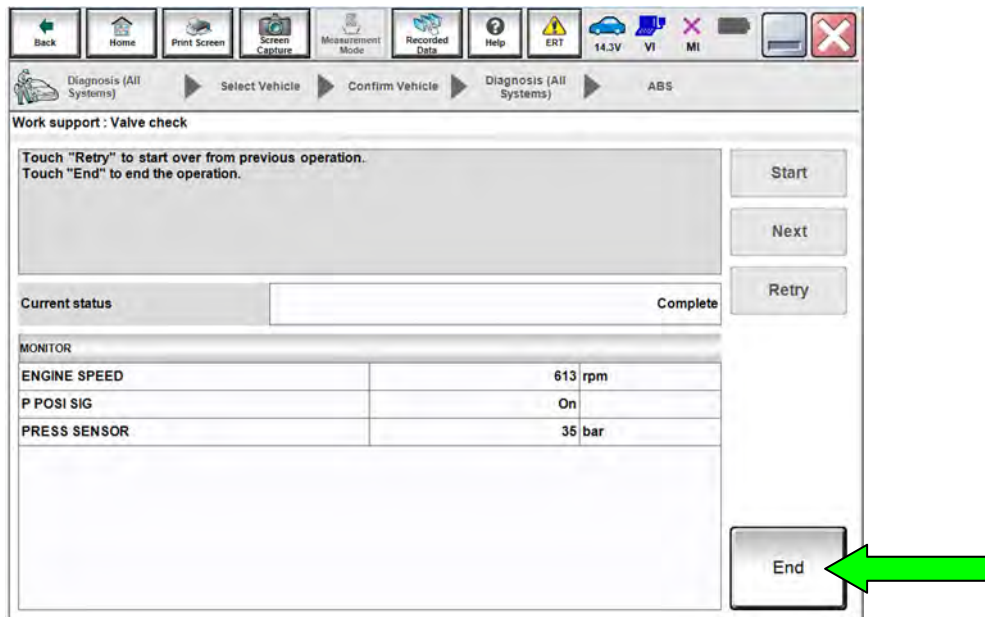


Figure 22

38. Turn the engine OFF.

39. Disconnect the C-III plus, VI and GR8 from the vehicle.

40. Reinstall the wheels and torque lug nuts.

- Torque: 108 N•m (11kg-m, **80 ft-lb**)

## Install New Brake Fluid Reservoir Cap

41. Mark the top of the new DOT 4 brake fluid reservoir cap with white touch-up paint, as shown in Figure 23.
- Reservoir cap and touch-up paint are listed in the Parts Information of this bulletin.
  - Highlight “**USE ONLY DOT 4**”.

**NOTE:** This cap will indicate to **USE ONLY DOT 4** as the service brake fluid.



Figure 23

42. Replace the brake fluid reservoir cap (Figure 24) with the new DOT 4 cap marked in step 41.



Figure 24

43. Place a printed copy of amended Owner's Manual pages into the customer's Owner's Manual (see page 30).

## PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
Nissan Genuine Brake Fluid (1) (DOT 4)	999MP-1LM6D4 (2)	1
Master Cylinder Reservoir Cap	D6020-64J0A	1
ABS Actuator	(3)	1
White Touch-up Paint (GLACIER WHITE)	999PP-SDQAK	As needed
Rust Penetrant	999MP-A3020P	(4)

- (1) Only use the 1.06 quart (1 liter) size DOT 4 specifically supplied for this service procedure.
- (2) Order this item through the Nissan Maintenance Advantage program: Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal; www.NNAnet.com and click on the "Maintenance Advantage" link.
- (3) Submit the online form that was filled out while performing the service procedure to order parts.
- (4) Shop supply.

## EXPENSE CODE

EXPENSE CODE	DESCRIPTION	MAX AMOUNT
105	Touch-up Paint	\$0.30

## CLAIMS INFORMATION

Submit a "CM" line claim using the following claims coding:

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
R1814	Inspect ABS Actuator	R18140	2.2 hrs.
	Inspect and Replace ABS Actuator	R18141	4.3 hrs.

## AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
December 19, 2018	NTB18-087	Original bulletin published.



## ONLINE FORM/AUTO PARTS ORDERING PROCESS

The following online form must be filled out while performing the service procedure, and then submitted to Nissan to validate the completion of the inspection, and to order parts if necessary.

- The form can be accessed by selecting **ASIST > Tech Support Info > Bulletin Support Items > Voluntary Safety Recall Campaign – 2009 Murano (Z51) Brake Fluid Flush Check Sheet** (see page 6, Figure 2 and Figure 3).
- When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection, and to order parts if necessary.

44. Input vehicle VIN, Dealer Number, Technician Name, Technician ID, Service Manager and whether FWD or AWD.

VIN	<input type="text"/>	
Model Year	<input type="text" value="2009"/>	
Model	<input type="text" value="Murano"/>	
Dealer Number	<input type="text"/>	
Technician Name	<input type="text"/>	
Technician ID	<input type="text"/>	
Service Manager	<input type="text"/>	
Drivetrain	<input type="radio"/> FWD <input type="radio"/> AWD	

**Important:** This information must be input correctly to enable the Auto Parts Ordering Process.

45. While completing the Valve Flushing Process, utilize the Valve Flushing Checklist to assist in tracking and completion.

Valve Flushing - Fill Reservoir After Each Check														
Test #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Flush	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bleed System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

46. Use the Valve Check checklist/drop down menu to record the Valve Inspection (yes/no) as it occurs.

Valve Check		
	Valve Inspection	
	Step 1	Step 2
	Did the brake pedal move towards floor?	Did the brake pedal move upward?
<b>FR Valve</b>	<input type="text" value="v"/>	<input type="text" value="v"/>
<b>FL Valve</b>	<input type="text" value="v"/>	<input type="text" value="v"/>
<b>RR Valve</b>	<input type="text" value="v"/>	<input type="text" value="v"/>
<b>RL Valve</b>	<input type="text" value="v"/>	<input type="text" value="v"/>
<b>Actuator Condition</b>		

47. Once completed, check the “Dealer Declaration” boxes to validate Brake fluid and Inspection completion.

**Dealer Declaration**

- I confirm that DOT 4 Brake Fluid Part #999MP1LM6D4 is used.
- I confirm that each hydraulic unit valve check and hydraulic unit flushing was completed per this checksheet and as described in the service campaign bulletin.

- a. Once all blocks are completed, push the "Submit" button to process.

**Voluntary Safety Recall Campaign (R1814)**  
**2009 Murano Brake Fluid Flush Check Sheet**

VIN	JN8AZ18W*9XXXXXX	<b>Example only</b>
Model Year	2009	
Model	Murano	
Dealer Number	0000	
Technician Name	John Doe	
Technician ID	0101	
Service Manager	Bob Doe	
Drivetrain	<input type="radio"/> FWD <input type="radio"/> AWD	

Valve Flushing - Fill Reservoir After Each Check														
Test #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Flush	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bleed System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Valve Check		
	Valve Inspection	
	Step 1	Step 2
	Did the brake pedal move towards floor?	Did the brake pedal move upward?
FR Valve	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>
FL Valve	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>
RR Valve	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>
RL Valve	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>
Actuator Condition		

**Dealer Declaration**

- I confirm that DOT 4 Brake Fluid Part #999MP1LM6D4 is used.
- I confirm that each hydraulic unit valve check and hydraulic unit flushing was completed per this checksheet and as described in the service campaign bulletin.



- b. For a “Good” ABS Actuator the following screen will populate. Follow instructions in green pop-up box, print and attach the ABS Actuator Checklist to Work Order.

**Voluntary Safety Recall Campaign (R1814) - 2009 Murano Brake Fluid Flush Result**

<b>INSPECTION COMPLETE</b>	
<ul style="list-style-type: none"> <li>• Please Print the ABS Check Sheet and attach to the Work Order</li> <li>• Place a printed Copy of Amended Owner’s Manual page(s) into the Owner’s Manual</li> <li>• Once complete, Submit warranty claim using claims coding</li> </ul>	

VIN	JN8AZ18W*9XXXXXX	<b>Example only</b>
Model Year	2009	
Model	Murano	
Dealer Number	0000	
Technician Name	John Doe	
Technician ID	0101	
Service Manager	Bob Doe	
Drivetrain	<input checked="" type="radio"/> FWD <input type="radio"/> AWD	

Valve Check		
	Valve Inspection	
	Step 1	Step 2
	Did the brake pedal move towards floor?	Did the brake pedal move upward?
<b>FR Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>FL Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>RR Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>RL Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>Actuator Condition</b>	OK <input type="button" value="v"/>	OK <input type="button" value="v"/>

**Dealer Declaration**

- I confirm that DOT 4 Brake Fluid Part #999MP1LM6D4 is used.
- I confirm that each hydraulic unit valve check and hydraulic unit flushing was completed per this checksheet and as described in the service campaign bulletin.

- c. For a “No-Good” ABS Actuator the following screen will populate. Follow the instructions in the yellow pop-up box.

This screen indicates that your ABS Actuator has been ordered along with the P/N.

**Do not** file the warranty claim until the ABS Actuator has been installed.

Direct any questions to [CampaignAnnouncements@Nissan-Usa.com](mailto:CampaignAnnouncements@Nissan-Usa.com) and print and attach the ABS Actuator Checklist to the Work Order.

**Voluntary Safety Recall Campaign (R1814) - 2009 Murano Brake Fluid Flush Result**

**CAMPAIGN AUTO ORDERING PROCESS**

(Do not order ABS Actuator using the standard parts process. The Part will be Auto ordered)

- The ABS Actuator Order will be placed automatically within 1 business day
- Part # D7660-1SW0C for FWD will be sent using the last 8 digits of the VIN on the Label
- Do Not file warranty claim until Actuator is installed on vehicle
- Direct any questions to Aftersales at CampaignAnnouncements@Nissan-Usa.com

VIN	<input type="text" value="JNBAZ18W*9XXXXXX"/>	<b>Example only</b>
Model Year	<input type="text" value="2009"/>	
Model	<input type="text" value="Murano"/>	
Dealer Number	<input type="text" value="0000"/>	
Technician Name	<input type="text" value="John Doe"/>	
Technician ID	<input type="text" value="0101"/>	
Service Manager	<input type="text" value="Bob Doe"/>	
Drivetrain	<input checked="" type="radio"/> FWD <input type="radio"/> AWD	

Valve Check		
	Valve Inspection	
	Step 1	Step 2
	Did the brake pedal move towards floor?	Did the brake pedal move upward?
<b>FR Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>FL Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>RR Valve</b>	Yes <input type="button" value="v"/>	Yes <input type="button" value="v"/>
<b>RL Valve</b>	Yes <input type="button" value="v"/>	No <input type="button" value="v"/>
<b>Actuator Condition</b>	OK <input type="button" value="v"/>	NG <input type="button" value="v"/>

**Dealer Declaration**

I confirm that DOT 4 Brake Fluid Part #999MP1LM6D4 is used.

I confirm that each hydraulic unit valve check and hydraulic unit flushing was completed per this checklist and as described in the service campaign bulletin.

# Owner's Manual Pages

## BRAKE FLUID

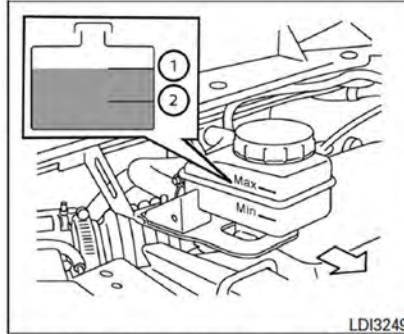
For additional brake fluid information, see "CAPACITIES AND RECOMMENDED FUEL/LUBRICANTS" in the "9. Technical and consumer information" section of this manual.

### ⚠ WARNING

- Use only new fluid from a sealed container. Old, inferior or contaminated fluid may damage the brake system. The use of improper fluids can damage the brake system and affect the vehicle's stopping ability.
- Clean the filler cap before removing.
- Brake fluid is poisonous and should be stored carefully in marked containers out of reach of children.

### ⚠ CAUTION

Do not spill the fluid on any painted surfaces. This will damage the paint. If fluid is spilled, immediately wash the surface with water.



LDI3249

Check the fluid level in the reservoir. If the fluid is below the MIN line② or the brake warning light comes on, add Genuine NISSAN brake fluid CLARIANT 6M DOT4 or equivalent DOT4 up to the MAX line①. If the fluid must be added frequently, the system should be checked by a NISSAN dealer.

## CAPACITIES AND RECOMMENDED FUEL/LUBRICANTS

The following are approximate capacities. The actual refill capacities may be a little different. When refilling, follow the procedure instructed in the "8. Maintenance and do-it-yourself" section to determine the proper refill capacity.

	Capacity (Approximate)			Recommended specifications
	US measure	Imp measure	Liter	
Fuel	21-5/8 gal	18 gal	82	Unleaded gasoline with an octane rating of at least 87 AKI (RON 91)*1
Engine oil*2				
Drain and refill				
With oil filter change	4-7/8 qt	4 qt	4.6	• Engine oil with API Certification Mark*3
Without oil filter change	4-1/2 qt	3-3/4 qt	4.3	• Viscosity SAE 5W-30
Cooling system				
With reservoir	10 qt	8-1/4 qt	9.4	50% Genuine NISSAN Long Life Antifreeze/Coolant or equivalent
Reservoir	7/8 qt	3/4 qt	0.8	50% Demineralized or distilled water
Continuously Variable Transmission (CVT) fluid	—	—	—	Genuine NISSAN CVT Fluid NS-2*4
Differential gear oil	—	—	—	Genuine NISSAN Differential Oil Hypoid Super GL-5 80W-90 or API GL-5 Viscosity SAE 80W-90*5
Transfer oil	—	—	—	Genuine NISSAN Differential Oil Hypoid Super GL-5 80W-90 or API GL-5 Viscosity SAE 80W-90
Power steering fluid (PSF)	Refill to the proper level according to the instructions in the "8. Maintenance and do-it-yourself" section.			Genuine NISSAN PSF or equivalent*8
Brake fluid				Genuine NISSAN brake fluid CLARIANT 6M DOT4 or equivalent DOT4
Multi-purpose grease	—	—	—	NLGI No. 2 (Lithium Soap base)
Air conditioning system refrigerant	—	—	—	HFC-134a (R-134a)*7
Air conditioning system lubricants	—	—	—	NISSAN A/C System Oil Type R or exact equivalent
Window washer fluid	—	—	—	Genuine NISSAN Windshield Washer Concentrate Cleaner & Antifreeze or equivalent

\*1: For additional information, see "FUEL RECOMMENDATION" later in this section.

\*2: For additional information, see "ENGINE OIL" in the "8. Maintenance and do-it-yourself" section for changing engine oil.

\*3: For additional information, see "ENGINE OIL AND OIL FILTER RECOMMENDATION" later in this section.

\*4: Use only Genuine NISSAN CVT Fluid NS-2. Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT, which is not covered by the NISSAN new vehicle limited warranty.

\*5: For hot climates, viscosity SAE 90 is suitable for ambient temperatures above 32°F (0°C).

\*6: Available in mainland U.S.A. through a NISSAN dealer.

\*7: For additional information, see "VEHICLE IDENTIFICATION" later in this section for air conditioner specification label.

\*8: DEXRON™VI type ATF or Canada NISSAN Automatic Transmission Fluid may also be used.