

May 25, 2021

Date:

VOLUNTARY SAFETY RECALL CAMPAIGN 2009 MURANO; BRAKE FLUSH

NTB18-087A

This bulletin has been amended. See AMENDMENT HISTORY on the last page. Discard all previous versions of this bulletin.

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

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

INTRODUCTION

BR18-010A

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 <u>is not allowed</u>, including the use of any brake fluid other than the **DOT 4** shown in Figure 1.

The following Service Procedure uses an online form that <u>must be filled out</u> while performing the procedure (see page 24 for further details). When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection and, if necessary, to provide parts ordering information.

- 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 the ONLINE FORM/PARTS ORDERING INFORMATION (see page 24), and transfer the information to a WiFi connected ASIST PC, 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 1

- 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 wheel and tire assemblies.
- Apply Nissan rust penetrant (or equivalent) to all of the brake caliper bleeder fittings.
 IMPORTANT: Allow rust penetrant to soak for at least 10 minutes before attempting to loosen bleeder fittings.
- 5. Lower the vehicle so that you can enter the driver's door.

NOTICE

To prevent damage to the vehicle paint and the brake system:

- 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.
- 6. Drain the brake fluid from brake fluid reservoir as follows:

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





- 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 <u>must be filled out</u> 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 3 and Figure 4).

Further details can be found on page 24.

- When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection and, if necessary, to provide parts ordering information.
- If you are not connected to WiFi at this time, use a printed copy of the ONLINE FORM/PARTS ORDERING INFORMATION (see page 24), and transfer the information to a WiFi connected ASIST PC, after the procedure has been completed.







Figure 4

NOTICE

To prevent damage to the brake system, all of the following brake fluid bleed cycles <u>must</u> <u>be completed</u> to fully flush the brake system with DOT 4 brake fluid.

IMPORTANT: <u>STOP</u> and read steps 8-34 completely before proceeding.

- Connect a battery maintainer/smart charger to the vehicle battery.
 NOTE: Battery voltage must stay between 12 volts and 15.5 volts.
- 9. Turn the ignition ON, engine OFF.
- 10. Connect the VI to the vehicle.
- 11. Start C-III plus.
- 12. Wait for the VI to be recognized.
 - The serial number will display when the VI is recognized.

13. Select Diagnosis (All Systems).

	Back Home Print Screen Capture Measurement Mode Rec	Corded Data
	Connection Status	Diagnosis Menu
	Serial No. Status	Diagnosis (One System)
The VI is recognized	VI 2316951 Normal Mode/USB connection	Diagnosis (All Systems)
	MI - O	
	No connection	Re/programming, Configuration
	Select VI/MI	Immobilizer
	Application Setting	
	Sub mode	Maintenance
	VDR	

Figure 5

14. Select Automatic Selection(VIN).

Back Home	Print Screen	en Measurement Red		▲ 2000 14.6V VI MI		
Diagnosis (All Systems)	Diagnosis (All Select Vehicle Systems)					
Automatic Se	election(VIN)	cti	on(Vehicle Name)			
Vehicle Name :				Model Year :	Sales Channel	
*MURANO Camp:P8201	FRONTIER	MURANO Hybrid	QASHQAI/Rogue Sport	2009	NISSAN	
350Z	JUKE	NISSAN GT-R	QUEST	2007	INFINITI	
370Z	JUKE NISMO	NISSAN GT-R NISMO	ROGUE	2006	DATSUN	
370Z Convertible	KICKS	NV	ROGUE Hybrid	2005		
ALTIMA coupe	LEAF	NV200	ROGUE Select	2004		
ALTIMA Hybrid	MAXIMA	NV200 TAXI	SENTRA	2003		
ALTIMA sedan	MICRA	PATHFINDER	TITAN			
ARMADA	MURANO	PATHFINDER ARMADA	VERSA Hatchback		CLEAR	
CUBE	MURANO Cross Cabriolet	PATHFINDER Hybrid	VERSA NOTE		Select	
		1	/2	2/2	Geleci	

Figure 6

15. Confirm the **VIN or Chassis #** is correct, and then select **Confirm**.

Back Home Print Screen Canter	Measureme mt Mode Recorded Data RET 4.7V VI MI	
Configuration	cle Selection Vehicle Confirmation	
Please confirm selected information vehicle, touch "Change".	and touch "Confirm". In case you want to select another	
VIN or Chassis #	XNXAGGDXAXXX02X9X	
Vehicle Name :	MURANO	
ModelYear	2009	
	1/1	
		Change Confirm

Figure 7

16. Select ABS.

Back Home	Print Screen	Screen Capture Measurement Mode Recorded Data Image: Capture Image: Capture <th image:<="" th=""></th>	
Diagnosis (All Systems)	Select	t Vehicle Diagnosis (All Systems)	
J. All DTC	ch. CAN Diag	CAN DIAG SUPPORT MNTR	
Result		Detailed Information	
ENGINE	NO DTC		
ABS	NO DTC		
METER/M&A	NO DTC		
ВСМ	NO DTC		
AIR BAG	NO DTC	Print for Customer	
TRANSMISSION	NO DTC	Print	
IPDM E/R	NO DTC	Save	
1/2		0/0 ERASE	

Figure 8

17. Select Work support.

Image: Back	-
Diagnosis (All Systems) Select Vehicle Confirm Vehicle Diagnosis (All Systems) ABS	
Self Diagnostic Da Generation Contraction Da Contraction Contracti	
No DTC is detected. Further testing may be required.	
	Print
	Save
1/1	ERASE

Figure 9

18. Select Valve flushing, and then select Start.

Image: Streen Back Image: Streen Capture Image: Streen Capture <t< th=""><th></th></t<>	
Diagnosis (All Systems) Select Vehicle Confirm Vehicle Diagnosis (All Systems)	ABS
Self Diagnostic Data Monitor Support Active Test	u tification
Test Item	
ST ANGLE SENSOR ADJUSTMENT	
DECEL G SEN CALIBRATION	
Valve check	
Valve flushing	
1/1	Start
Figure 10	

- 19. Press the brake pedal to raise the brake pressure to 21-39 bar (Figure 11).
- 20. While maintaining 21-39 bar of brake pressure, select **Next**.

NOTE: The brake pedal will drop after **Next** is selected. <u>Do not release the brake pedal.</u>

Back Print Screen Capture Mode	ert Recorded Data
Diagnosis (All Select Vehicle Cor Systems)	firm Vehicle Diagnosis (All Systems)
Work support : Valve flushing	
Satisfy following conditions: •Ignition switch ON (Engine stopped) •Connect to battery charger •Depress brake pedal (21 - 39 bar) Touch "Next". It is normal that Brake pedal stays depre	Next
Current status	Waiting for your operation
Cycle count	0
MONITOR	
ENGINE SPEED	0 rpm
P POSI SIG	On
PRESS SENSOR	21 bar
	End

Figure 11

IMPORTANT: For the following steps:

- Brake pedal pressure <u>must be</u> at 21-39 bar during the entire valve check procedure.
 - o If the pressure is outside this range, <u>an error will occur</u> as shown in Figure 12.
 - If this occurs, select **Next**, regulate brake pressure to 21-39 bar, and then restart the test.
 - Only select **End** if C-III plus is no longer responding. This will restart the test from the beginning.

Back Home Print Screen Sc	Image: Second ed Data Image: Second ed Data <td< th=""><th>•</th></td<>	•
Work support : Valve flushing	p p gatering p	
Flushing was unsuccessful. Touch "Next" to start over from previe Touch "Complete" to end operation.	ous operation.	Next
Current status	Operation unsuccessful	
Cycle count	0	
	Do Not select End . This will start the procedure from the beginning.	
	Figure 40	

Figure 12

IMPORTANT: In step 21 select **Next** <u>ONLY 1 time</u>. Do Not select **Next** again until instructed to in step 23.

21. While continuing to press the brake pedal, select **Next**.

Back Home Print Screen Sc	reen hure Messrement Mode Recorded Data	-
Diagnosis (All Select Ve	ehicle Confirm Vehicle Diagnosis (All ABS Systems)	
Work support : Valve flushing		
After checking the motor being activation	ising the brake pedal to start valve flushing. ted, release brake pedal. be heard during operation. This sound is not malfunction.	Next
Current status	Valve check	
Cycle count	0	
		End

Figure 13

- When the ABS motor buzz sound is heard, **RELEASE** the brake pedal.
 - "ABS motor operating" will be displayed on the screen under Current status. See Figure 14.
 - The ABS motor buzz will continue for 30 seconds.

Back Rome Print Screen Sca Diagnosis (All Sca Diagnosis (All Sca	Image: Second ed Data Image: Second ed Data <td< th=""><th></th></td<>	
Work support : Valve flushing	F F Systems) F	
Valve flushing is in progress. Operation sound caused by motor can operation continues for Approx. 30 sec	be heard during the operation. This sound is not malfunction. This onds.	Next
Current status	ABS motor operating	
Cycle count	0	
		End

12/30

NOTICE

To prevent damage to the brake system, DO NOT use a power bleeder <u>of any type</u> in the following steps to bleed or drain the brake fluid.

- 22. Release some brake fluid from each brake caliper <u>one time</u>, as follows:
 - All 4 brake calipers <u>must</u> be bled once, before selecting **Next**.
 - Refill the brake fluid reservoir with DOT 4 brake fluid as needed.

IMPORTANT: <u>Do not</u> 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.



Figure 15

- b. Fully depress the brake pedal 1 time, and then hold light pressure.
- c. Loosen the bleeder valve, while the brake pedal is being depressed, to bleed (release) the 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.
- 23. When the **Current status** shows "Operation wait", select **Next** to run valve flushing again.

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

Back Home Print Screen Scr	tern tern Mode	-
Work support : Valve flushing Motor stopped. Perform following oper -Fully depress brake pedal. -Loosen air bleeder and drain brake fl -Refill new brake fluid. After performing and completing for all	uid.	Next
Current status	Operation wait	
Cycle count	0	

24. Repeat steps 19-23 thirteen more times until **Current status** displays "Complete", and then select **End**.

IMPORTANT:

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

Back Home Print Screen Sci	reen ture Mode Recorded Data REF REF CONTRACTOR CONTRAC	•
Diagnosis (All Select Ve	chicle Confirm Vehicle Diagnosis (All ABS	
Work support : Valve flushing		
Flushing completed. Touch "End". Perform valve check again.		Next
Current status	Complete	
Cycle count	14	
		End

Figure 17

25. Remove the battery maintainer/smart charger from the vehicle.

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 <u>must be filled out</u> 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 3 and Figure 4).
 - > Further details can be found on page 24.
- When the form has been completed, it will be submitted to Nissan to validate the completion of the inspection and, if necessary, to provide parts ordering information.
- If you are not connected to WiFi at this time, use a printed copy of **ONLINE FORM/PARTS ORDERING INFORMATION** (see page 24), and transfer the information to a WiFi connected ASIST PC, after the procedure has been completed.

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

- **FR** Front Right
- FL Front Left
- **RR** Rear Right
- RL Rear Left
- 26. Start the engine.
- 27. Select Valve check, and then select Start.

Image: Back Imag	-
Diagnosis (All Systems) Select Vehicle Confirm Vehicle Systems) ABS	
Self Diagnostic Data Monitor Work support Active Test	
Test Item	
ST ANGLE SENSOR ADJUSTMENT	
DECEL G SEN CALIBRATION	
Valve check	
Valve flushing	
1/1	Start

IMPORTANT: For the following steps:

- Brake pedal pressure <u>must be</u> at 21-39 bar during the entire valve check procedure.
 - o If the pressure is outside this range, <u>an error will occur</u> as shown in Figure 19.
 - 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.

Back Home Print Screen Screen Meas	arement Mode Recorded Data
Diagnosis (All Select Vehicle	Confirm Vehicle Diagnosis (All Systems)
Work support : Valve check	
Operation is unsuccessful. Touch "Retry" to start over from previous operati Touch "End" to end the operation.	ion. Start
	Next
Current status	FR operation unsuccessful
	If End is selected, the procedure will start from the beginning.
r	Figure 19

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

29. 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 <u>brake pedal should</u> <u>smoothly move down</u> toward the floor.

Back Rome Print Screen Scr Book Diagnosis (All Systems) Select Ve	een Measurement Recorded Help Mode Data Diagn	ERT 14.5V VI MI	
Work support : Valve check			
Perform valve check while depressing •Brake fluid pressure: 21 - 39 bar •Engine: Running •Shift position: P	brake pedal and satisfying the follow	ng conditions.	Start
- Shirt position: P			Next
Current status		FR valve check st	Retry
MONITOR			
ENGINE SPEED		1016 rpm	
P POSI SIG		On	
PRESS SENSOR		27 bar	
			End

Figure 20

- 30. Did the brake pedal move down toward the floor?
 - YES: Proceed to step 31 on page 19.
 - **NO:** Proceed to the next page.

Only perform the following if <u>NO</u> was the answer to step 30:

- 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 24).
- d. Replace the ABS actuator.
 - For ABS actuator replacement, refer to the ESM section BRC Brake Control System.
 - **IMPORTANT:** Refill with **DOT 4** brake fluid ONLY.
- e. Bleed the air from each brake circuit as follows:
 - 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.
 - Fully depress the brake pedal 4 to 5 times, and then hold light pressure.
 - Loosen the bleeder valve, while the brake pedal is being depressed, to bleed air, and then tighten the bleeder valve.



Figure 21

- 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. Skip to step 37 on page 22.

31. Select Next.

Back Home Print Screen S	icreen apture Mode Recorded Data	Help	13.4V VI MI		
Diagnosis (All Select V Systems) Select V	/ehicle Confirm Vehicle	Diagnosis (All Systems)	ABS		
Work support : Valve check					
Check brake pedal stroke. If there are any changes, touch "Next If there aren't any changes, the valve i	". is sticking. Stop the operation a	ind replace ABS ac	ctuator and C/U.	Start	
				Next	
Current status		Du	uring FR valve check	Retry	
MONITOR					
ENGINE SPEED		988 r	rpm		
P POSI SIG		On		-	
PRESS SENSOR		21 b	bar	-	
				End	
<u> </u>	Figure 2	22			

- 32. While maintaining 21-39 bar of brake pressure, select Next again.
 - After **Next** is selected, the ABS pump motor will run/buzz and the <u>brake pedal</u> <u>should forcibly move up</u> away from the floor.

Rook Home Drint Coroon S	Creen spture Mode	ent Recorded Data	Help		<mark>л х</mark> I И мі	-]
Diagnosis (All Select Vo	ehicle 🕨 Con	firm Vehicle	Diagnosis (All Systems)		ABS		
Work support : Valve check							
Operation is completed. Touch "Next" Operation sound caused by motor can		ouching "Next"	'. This sound is n	ot malfunct	ion.	Start	
						Next	
Current status)	During FR v	valve check	Retry	
MONITOR							
				rpm		-	
P POSI SIG			On			-	
PRESS SENSOR			22	bar		-	
						End	

Figure 23

- After Next is selected, "ABS motor operating" will be displayed under Current status.
- This operation will continue for 20 seconds before the **Start** button will be active again.

Back Home Print Screen Sc	Measuremen Mode	nt Recorded Data	Pelp ERT	14.3V VI	X I	
Diagnosis (All Systems)	ehicle 🕨 Conf	firm Vehicle 🕨	Diagnosis (All Systems)	АВ	s	
Work support : Valve check						
Brake pedal moves up. after the moto If brake pedal stays depressed, the va Stop the operation and replace ABS a Sound caused by motor can be heard	alve is sticking. Ictuator and C/U			n		Start
This operation continues for Approx. 20		ni. This sound is	not manuficuo			Next
Current status				ABS motor o	operating	Retry
MONITOR						
ENGINE SPEED			638	rpm		
P POSI SIG			On			
PRESS SENSOR			52	bar		
						End
						End

Figure 24

- 33. Did the brake pedal move up away from the floor?
 - YES: Proceed to step 34 on page 22.
 - **NO:** Proceed to the next page.

Only perform the following if <u>NO</u> was the answer to step 33:

- a. Select End.
- b. Turn the engine OFF.
- c. Submit the online form that was filled out while performing the service procedure for parts ordering information (see page 24).
- d. Replace the ABS actuator.
 - For ABS actuator replacement, refer to the ESM section BRC Brake Control System.
 - IMPORTANT: Refill with DOT 4 brake fluid ONLY.
- e. Bleed the air from each brake circuit as follows:
 - 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.
 - Fully depress the brake pedal 4 to 5 times, and then hold light pressure.
 - Loosen the bleeder valve, while the brake pedal is being depressed, to bleed air and then tighten the bleeder valve.



Figure 25

- 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. Skip to step 37 on page 22.

34. Perform steps 28 through 33 on the FL, RR and RL valves and then proceed to step 35.

NOTE: When steps 28 to 33 have been competed for all four wheels (FR, FL, RR and RL), **Current status** on the C-III plus screen will display "Complete" (Figure 26).

35. Select End.

	Screen Capture	ent Recorded Data	Help ERT		VI MI		$\mathbf{\times}$
Diagnosis (All Select Systems)	t Vehicle 🕨 Con	firm Vehicle	Diagnosis (All Systems)		ABS		
Work support : Valve check							
Touch "Retry" to start over from pro Touch "End" to end the operation.	evious operation.					Start	
						Next	
Current status					Complet	eRetry	
MONITOR							
ENGINE SPEED			613	rpm			
P POSI SIG			On				
PRESS SENSOR			35	bar			
						End.	
						End	

Figure 26

- 36. Turn the engine OFF.
- 37. Disconnect the C-III plus, VI and battery maintainer/smart charger from the vehicle.
- 38. Reinstall the wheels and torque lug nuts.
 - Torque: 108 N•m (11kg-m, 80 ft-lb)

Install New Brake Fluid Reservoir Cap

- 39. Mark the top of the new DOT 4 brake fluid reservoir cap with white touch-up paint, as shown in Figure 27.
 - Highlight "USE ONLY DOT 4".

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



Figure 27

40. Replace the brake fluid reservoir cap (Figure 28) with the new DOT 4 cap marked in step 39.



Figure 28

41. Place a printed copy of amended Owner's Manual pages into the customer's Owner's Manual (see page 29).

ONLINE FORM/PARTS ORDERING INFORMATION

The following online form <u>must be filled out</u> while performing the service procedure and then submitted to Nissan to validate the completion of the inspection and, if necessary, to provide parts ordering information.

- 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 3 and Figure 4).
- 42. Input vehicle VIN, Dealer Number, Technician Name, Technician ID, Service Manager and whether FWD or AWD (Figure 29).

VIN	
Model Year	2009
Model	Murano
Dealer Number	
Technician Name	
Technician ID	
Service Manager	
Drivetrain	○FWD ○AWD

Figure 29

43. While completing the Valve Flushing Process, utilize the Valve Flushing Checklist to assist in tracking and completion (Figure 30).

Test # 1 2 3 4 5 6 7 8 9 10 11 12 Flush		Valve	e Flus	hing	- Fill	Rese	rvior	After	r Eac	h Ch	eck				
	t #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	sh														
Bleed System	ed System														

44. Use the Valve Check checklist/drop down menu to record the Valve Inspection (yes/no) as it occurs (Figure 31).

	Valve Check	
	Valve In	spection
	Step 1	Step 2
	Did the brake pedal move towards floor?	Did the brake pedal move upward?
FR Valve		
FL Valve		
RR Valve		
RL Valve		
Actuator Condition		

Figure 31

45. 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.

 \Box 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 the steps are completed, select Submit.

VIN Model Year Model	Ex														
Dealer Number	0000														
Technician Name	John D	oe													
Technician ID	0101														
Service Manager	Bob Do														
Drivetrain	OFW OAW														
		Valv	e Flus	hing -	Fill F	Reserv	vior A	fter E	Cach C	heck					
Test #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Flush															
Bleed System															
					Val	ve Ch	eck								
							Valv	e Insp	ection						
				5	štep 1						Step	2			
		Did	the bra	ake ped	lal mov	re towa	ards flo	or?	Did the brake pedal move upward?						
FR Valve				Yes	5	~				Y	'es	~			
FL Valve				Yes	5	~				Y	′es	~			
RR Valve				Yes	5	~				Y	'es	~			
RL Valve				Yes	5	~			Yes V						
Actuator Cond	ıdition														
Dealer Declaration ✓ I confirm that D ✓ I confirm that ea and as described in	OT 4 Ba ich hydr	aulic u	nit val	ve cheo	ck and				ing was	s comp	leted p	er this	checks	heet	Submi

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.

		INSPECTION COMPLETE	
Please Print	t the AB	S Check Sheet and attach to the Work Or	der
• Place a prin Manual	ited Cop	y of Amended Owner's Manual page(s) in	nto the Owner's
Once comp	lete, Sul	omit warranty claim using claims coding	
VIN			
Model Year		ample only	
Model	Murano		
Dealer Number	0000		
Technician Name	John Do	28	
Technician ID	0101		
Service Manager	Bob Do	e	
Drivetrain	® FW ○ AW		
		Valve Check	
		Valve In:	spection
		Step 1	Step 2
		Did the brake pedal move towards floor?	Did the brake pedal move upward?
FR Valve		Yes	Yes 🗸
FL Valve		Yes	Yes 🗸
FL Valve RR Valve		Yes V	Yes V
RR Valve	ition	Yes V	Yes 🗸

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.

Figure 34

Prin

c. For a "No-Good" ABS Actuator the screen in Figure 35 will populate. Follow the instructions in the yellow pop-up box.

This screen provides the ABS part number that needs to be ordered in DBS.

<u>Do not</u> file the warranty claim until the ABS Actuator has been installed.

	Inspection Result is NG			
 Place a parts order File the warranty cl 	ctuator S Check Sheet and attach to the Work O in DBS for Part Number : D7660-1V40B aim AFTER the actuator is Installed on v y of the Amended Owner's Manual page	zehicle		
VIN Model Year Model Murano Dealer Number 0000 Technician Name John Doe Technician ID 0101 Service Manager Bob Doe Drivetrain • FWD O AWD				
	Valve Check		<u>ז</u>	
	Valve In	spection		
	Step 1	Step 2		
	Step 1 Did the brake pedal move towards floor?	Step 2 Did the brake pedal move upward?	ĵ	
FR Valve		_		
FR Valve FL Valve	Did the brake pedal move towards floor?	Did the brake pedal move upward?		
	Did the brake pedal move towards floor?	Did the brake pedal move upward?		
FL Valve	Did the brake pedal move towards floor?	Did the brake pedal move upward?		

Owner's Manual Pages

BRAKE FLUID

For additional brake fluid information, see "CA-PACITIES 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.



Check the fluid level in the reservoir. If the fluid is below the MIN line (2) or the brake warning light comes on, add Genuine NISSAN brake fluid CLARIANT 6M DOT4 or equivalent DOT4 up to the MAX line (1). 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)		6	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	1					
	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 gea	r 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 th	e instructions	Genuine NISSAN PSF or equivalent*8	
Brake fluid		in the "8. Maintenance and do-it-yourself" section.			Genuine NISSAN brake fluid CLARIANT 6M DOT4 or equivalent DOT	
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 & Antifreez 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.

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 for parts ordering information.
- (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
May 25, 2021	NTB18-087A	Changes made throughout SERVICE PROCEDURE