



SERVICE CAMPAIGN BULLETIN

BR21-001

NISSAN

NTB21-047

June 1, 2021

VOLUNTARY SERVICE CAMPAIGN BRAKE FLUID FLUSH AND ABS ACTUATOR INSPECTION

CAMPAIGN ID #: APPLIED VEHICLES: P0A08 2010-2014 Murano (Z51) 2011-2014 Murano CrossCabriolet (Z51) 2011-2015 Quest (E52)

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

INTRODUCTION

Nissan is conducting this voluntary service campaign, on certain specific model year 2010-2014 Murano, 2011-2014 Murano CrossCabriolet, and 2011-2015 Quest vehicles, to remove the DOT 3 brake fluid, add DOT 4 brake fluid, and inspect the ABS actuator. This service will be performed at no charge to the customer for parts or labor.

IDENTIFICATION NUMBER

Nissan has assigned identification number P0A08 to this campaign. This number must appear on all communication and documentation of any nature dealing with this campaign.

DEALER RESPONSIBILITY

Dealers are to repair vehicles falling within range of this campaign that enter the service department. This includes vehicles purchased from private parties, vehicles presented by transient (tourists) owners, and vehicles in a dealer's inventory.

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.



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 > P0A08 Voluntary Service Campaign - 2010-2014 Murano (Z51) 2011-2015 Quest (E52) 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 > P0A08 Voluntary Service Campaign – 2010-2014 Murano (Z51) 2011-2015 Quest (E52) 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.







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	VI 2316051	
recognized	Normal Mode/USB connection	Diagnosis (All Systems)
	MI - No connection	Re/programming, Configuration
	Select VI/MI	Immobilizer
	Application Setting	
	Sub mode	Maintenance
	VDR	

14. Select Automatic Selection(VIN).

Back Home	Print Screen	en Measurement Mode	corded Data	14.6V VI MI	-		
Diagnosis (All Select Vehicle							
Automatic Selection(VIN)							
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		Salaat		

Figure 6

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

Image: Back Image: Back	een Screen Caolure	Measureme nt Mode	Recorded Data	() Help	ERT	14.7V	Yil VI	× MI	
Re/programming, Configuration	Vehic	cle Selection	V Con	'ehicle firmation					
Please confirm selected i vehicle, touch "Change".	information	and touch "	Confirm".	In case y	you wa	nt to se	lect ar	nothei	
VIN or Chassis #			***	6600	x%% XX	96X			
Vehicle Name :		MURANO							
Model Year				201	4				_
						1 / 1]
						I			Change Confirm

Figure 7

16. Select ABS.

Back Home	Print Screen	Screen Capture Mode Recorded Data
Diagnosis (All Systems)	Select	t Vehicle Diagnosis (All Systems)
Jaii dtc	ca. CAN Diag	CAN DIAG
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.

Back Image: Capture Image: Capture <th>-</th>	-
Diagnosis (All Systems) Select Vehicle Confirm Vehicle Diagnosis (All Systems) ABS	
Self Diagnostic Da Generation Self Diagnostic CU CONTRACTION CONTRACTICON CONTRA	
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: Second print screen Image: Screen capture Image: Screen capture	P 🗙 🖿 🔜 🔀
Diagnosis (All Systems) Select Vehicle Confirm Vehicle Diagnosis (All Systems)	ABS
Self Diagnostic Data Monitor Support Active Test	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



IMPORTANT: For the following steps:

- Brake pedal pressure <u>must be</u> 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 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	Image: Construction of the construction of
Diagnosis (All Systems) Select	Tehicle Confirm Vehicle Diagnosis (All Systems) ABS
Work support : Valve flushing	
Flushing was unsuccessful. Touch "Next" to start over from prev Touch "Complete" to end operation.	ious operation.
Current status	Operation unsuccessful
Cycle count	0
	Do Not select End . This will start the procedure from the beginning.

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	reen hure Messrement Mode Recorded Data	-
Diagnosis (All Select Ve	ehicle Confirm Vehicle Diagnosis (All ABS	
Work support : Valve flushing		
Fully depress brake pedal. Touch "Next" while continuing depres After checking the motor being actival Operation sound caused by motor can	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 Bone Print Screen Sc	reen pture Messurement Mode Recorded Data	ERT 14.4V VI MI	-					
Diagnosis (All Systems) Select Ve	ehicle Confirm Vehicle Diagno	ems) ABS						
Work support : Valve flushing	Work support : Valve flushing							
Valve flushing is in progress. Operation sound caused by motor can be heard during the operation. This sound is not malfunction. This operation continues for Approx. 30 seconds.								
Current status		ABS motor operating						
Cycle count		0						
			End					
	Eiguro 14							

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 flush the brake system with DOT 4.

Diagnosis (All Systems) Select Vehicle Confirm Vehicle Systems) ABS
Work support : Valve flushing Motor stopped. Perform following operation for each wheelFully depress brake pedalLoosen air bleeder and drain brake fluidRefill new brake fluid. After performing and completing for all four wheels, touch "Next".
Current status Operation wait
End

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	reen pture Mode Recorded Data	Image: Base of the second se	VI MI	•
Diagnosis (All Select Ve	ehicle Confirm Vehicle	Diagnosis (All Systems)	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 > P0A08 Voluntary Service Campaign – 2010-2014 Murano (Z51) 2011-2015 Quest (E52) 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: Second Laboratory Image:	
Diagnosis (All Select Vehicle Confirm Vehicle Systems)	
Self Diagnostic Data Monitor Support Active Test)
Test Item	
ST ANGLE SENSOR ADJUSTMENT	
DECEL G SEN CALIBRATION	
Valve check	
Valve flushing	
	Start
	Glait

- Brake pedal pressure <u>must be</u> at 21-39 bar during the entire valve check procedure.
 - > 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	reen hture Mode Recorded Data	▲
Diagnosis (All Systems)	chicle Confirm Vehicle Diagnosis System	s (All ABS
Work support : Valve check		
Operation is unsuccessful. Touch "Retry" to start over from prev Touch "End" to end the operation.	ous operation.	Start
		Next
Current status		FR operation unsuccessful
	If End is select procedure will s the beginn	cted, the start from ning.
1	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 Rime Print Screen Screen Messawa Diagnosis (All Systems) Select Vehicle	Recorded Data	14.5V VI MI ABS	
Work support : Valve check			
Perform valve check while depressing brake peda •Brake fluid pressure: 21 - 39 bar •Engine: Running •Shift pacifica: P	and satisfying the following cond	itions.	Start
- Shint position. P			Next
Current status		FR valve check start	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	Creen apture Mode Recorded Data	Help	13.4V VI MI	-	
Diagnosis (All 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 is	". s sticking. Stop the operation a	and replace ABS a	actuator and C/U.	Start	
				Next	
Current status		[During FR valve check	Retry	
MONITOR					
ENGINE SPEED		988	rpm		
P POSI SIG		On			
PRESS SENSOR		21	bar	_	
				End	
	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.

Back Home Print Screen	creen apture Mode	ent Recorded Data	Help	13.4V V	<mark>и х</mark> (-	
Diagnosis (All Select V Systems)	ehicle Con	firm Vehicle 🕨	Diagnosis (All Systems)		ABS		
Work support : Valve check							
Operation is completed. Touch "Next Operation sound caused by motor car	". h be heard after t	ouching "Next"	'. This sound is no	ot malfuncti	ion.	Start	
						Next	
Current status			[During FR v	alve check	Retry	
MONITOR							
ENGINE SPEED			903	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 Capture	Measurement Mode	14.3V VI MI	
Diagnosis (All Select Vehicle Systems)	Confirm Vehicle Diagnosis (All Systems)	ABS	
Work support : Valve check			
Brake pedal moves up, after the motor within If brake pedal stays depressed, the valve is Stop the operation and replace ABS actuato Sound caused by motor can be beard durin	ABS actuator and C/U is activated. icking. and C/U. operation. This sound is not malfunction		Start
This operation continues for Approx. 20 seco	is.	<i>.</i>	Next
Current status		ABS motor operating	Retry
MONITOR			
ENGINE SPEED	638	rpm	
P POSI SIG	Or	1	
PRESS SENSOR	52	bar	
			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.

Back Home Print Screen	Creen Apture Measurement Mode	Recorded Data	Help	14.3V	VI MI		
Diagnosis (All Select V Systems)	ehicle Confir	m Vehicle 🕨	Diagnosis (All Systems)		ABS		
Work support : Valve check							
Touch "Retry" to start over from prev Touch "End" to end the operation.	ious operation.					Sta	art
						Ne	xt
Current status					Complet	Ref	try
MONITOR						-	
ENGINE SPEED			613	rpm			
P POSI SIG			On				
PRESS SENSOR			35	bar			
						En	id <

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 > P0A08 Voluntary Service Campaign – 2010-2014 Murano (Z51) 2011-2015 Quest (E52) 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

Fia	ure	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 13 14 Flush Image: Im	Valve Flushing - Fill Reservior After Each Check														
Flush □ <th colspan="10">Test # 1 2 3 4 5 6 7 8 9 10</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th>	Test # 1 2 3 4 5 6 7 8 9 10										10	11	12	13	14
Bleed System	Flush														
	Bleed System														

Figure 30

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.

Figure 32

a. Once all the steps are completed, select Submit.

VIN	Ex	am	ole d	onlv	,											
Model Year Model	Murano			_												
Dealer Number	0000	-														
Technician Name	John D	oe														
Technician ID	0101															
Service Manager	Bob Do)e														
Drivetrain	OFW ○AW	OFWD OAWD Valve Flushing - Fill Reservior After Each Check														
		Valv	e Flus	hing ·	- Fill I	Reser	vior A	fter H	ach C	heck					j	
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							
				Ş	Step 1						Step	2				
		Did	the bra	ike ped	lal mov	re towa	ards flo	or?	Did tł	ne brak	e pedal	l move	upwar	d?		
FR Valve				Yes	5	~				Y	′es	~				
FL Valve				Yes	5	~				Ŷ	′es	~				
RR Valve			Yes V													
RL Valve																
Actuator Cond	lition															
Dealer Declaration	1															
✓ I confirm that D ✓ I confirm that ea	OT 4 Bi ich hydr the seri	rake Fl raulic u	uid Par mit val mnaior	t #999 ve che bullet	MP1L ck and in	M6D4 hydrau	is used ilic uni	l. t flushi	ng was	comp	leted p	er this	checks	heet	Submit	k

and as described in the service campaign bulletin.

Figure 33

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 the ABS Check Sheet and attach to the Work Order				
 Place a printed Copy of Amended Owner's Manual page(s) into the Owner's Manual Once complete, Submit warranty claim using claims coding 				
VIN Model Year E Model Murz	xample only	ample only		
Dealer Number 0000				
Technician ID 0101	Doe			
Service Manager Bob	ice Manager Bob Doe			
Drivetrain O AWD				
○ A	WD			
A (Valve Check			
A (Valve Check Valve In	spection		
	Valve Check Valve In Step 1	Ispection Step 2		
	Valve Check Valve In Step 1 Did the brake pedal move towards floor?	Step 2 Did the brake pedal move upward?		
FR Valve	Valve Check Valve In Step 1 Did the brake pedal move towards floor?	spection Step 2 Did the brake pedal move upward?		
FR Valve FL Valve	Valve Check Valve In Step 1 Did the brake pedal move towards floor? Yes V	spection Step 2 Did the brake pedal move upward? Yes		
FR Valve FL Valve RR Valve	Valve Check Valve Check Valve In Step 1 Did the brake pedal move towards floor? Yes Yes Yes	Step 2 Did the brake pedal move upward?		
FR Valve FL Valve RR Valve RL Valve	Valve Check Valve Check Valve In Step 1 Did the brake pedal move towards floor? Yes Yes Yes Yes Yes Yes Yes	spection Step 2 Did the brake pedal move upward? Yes		

rt #999MIPTLM0D4 13 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.

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	
 Replace the ABS Please Print the A Place a parts ord File the warranty Place a Printed C 	Actuator BS Check Sheet and attach to the Work O r in DBS for Part Number : D7660-1V40B claim AFTER the actuator is Installed on v opy of the Amended Owner's Manual page	rder vehicle (s) into the Owners Manual
VIN Model Year Model Mura Dealer Number 0000 Technician Name John Technician ID 010 Service Manager Bob Drivetrain @ F	xample only	
	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 🗸
FI Value	Yes 🗸	Yes 🗸
TL Valve		
RR Valve	Yes 🗸	Yes 🗸
RR Valve RR Valve RL Valve	Yes V Yes V	Yes V

Figure 35

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.

		Ca	pacity (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.		ne instructions	Genuine NISSAN PSF or equivalent*8
Brake fluid				elf" section.	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.

PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
Nissan Genuine Brake Fluid (DOT 4) (1)	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.

CLAIMS INFORMATION

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

CAMPAIGN ("CM") ID	DESCRIPTION	OP CODE	FRT
P0A08	Flush and Replace Brake Fluid	P0A080	2.2
	Replace ABS Actuator	P0A081	4.3

AMENDMENT HISTORY

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June 1, 2021	NTB21-047	Original bulletin published