



Technical Service Bulletin

GROUP RECALL	NUMBER 23-01-057H
DATE JUNE 2023	MODEL(S) PALISADE (LX2)

SUBJECT: BRAKE BOOSTER INSPECTION & REPLACEMENT
(RECALL 245)

★ IMPORTANT

Vehicle repairs related to safety recalls are critically important and must be performed properly in accordance with TSB procedures. Review this bulletin in its entirety prior to beginning any repair work.

As required by federal law, dealers must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo, and rental vehicles prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.


Access the “Vehicle Information” screen via WEBDCS to identify open recalls.

Description: Due to improper manufacturing of the brake booster, the diaphragm could slip out of position resulting in a loss of vacuum and a loss of power brake assist. This would result in increased vehicle stopping distance. This bulletin describes the procedure to inspect the brake booster and replace if necessary on certain 2023MY Palisade (LX2) vehicles.



Applicable Vehicles (Certain): 23MY Palisade (LX2) produced from 4/28/2023 ~ 5/11/2023.

Parts Information:

Model	Part Name	Part Number	Figure	Remarks
Palisade (LX2)	Brake Booster	59110-C5450QQH		LOT# DSA2 parts MUST be replaced

Warranty Information:

Model	Op. Code	Operation	Op. Time	Casual Part	Nature Code	Cause Code
Palisade (LX2)	31D051R0	Brake Booster Lot Check	0.8 M/H	59110-C5450QQH	B12	ZZ7
	31D051R1	Brake Booster Lot Check & Replacement	0.8 M/H			

NOTE 1: Submit claim on Claim Entry Screen as “Campaign” type.

NOTE 2: If a part is found in need of replacement while performing this recall and the affected part is still under warranty, submit a separate claim using the same repair order. If the affected part is out of warranty, submit a Prior Approval request for goodwill consideration prior to performing the work.

NOTE 3: Op times include VIN, Mileage and Part (if applicable) validation. **All claims submitted that have incomplete, illegible, or missing documentation are subject to debit.**

NOTE 4: Both op codes will reimburse the use of grease used for the clevis pin in sublet.

NOTE 5: The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

Video Procedure: Guided Video Information

Refer to the link below for guided video information:

<https://vimeo.com/838875935/9fb6ba9799>

Service Procedure:

STUI



As outlined in the Digital Documentation Policy, all claims require VIN and Mileage validation through VCI connection or photo capture, AND photo capture of the repair Part according to the steps in the TSB. **All claims submitted that have incomplete, illegible, or missing documentation are subject to debit.**

1. Record customer's radio presets.

With the engine off, depress the brake pedal three to four times to deplete the vacuum in the booster. This will aid in removing the brake booster vacuum hose in a later step.

Disconnect the battery negative (-) terminal.

Tightening Torque:

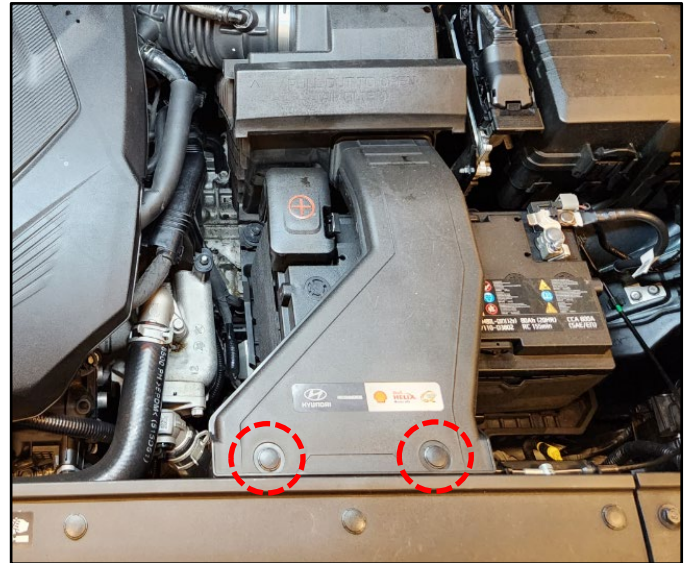
lb-ft	6.5
lb-in	78
N.m	8.8



2. Remove the engine cover.



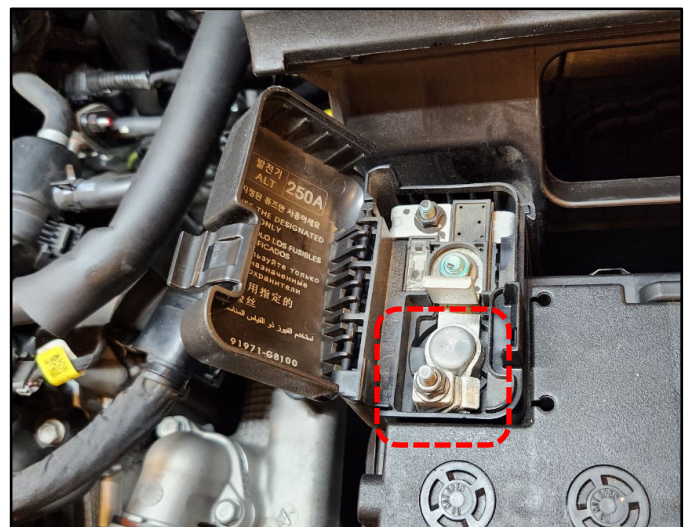
3. Remove the air intake duct.



4. Disconnect the battery positive (+) terminal.

Tightening Torque:

lb-ft	6.5
lb-in	78
N.m	8.8



5. Remove the battery bracket, and the battery.

i Information

Refer to the service manual:

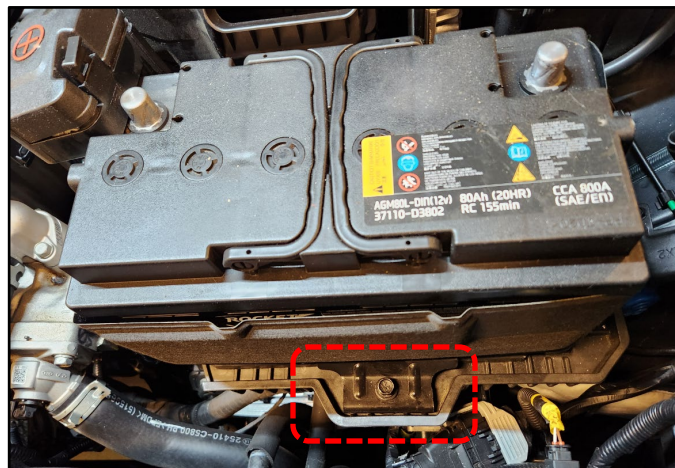
Engine Electrical System → Charging System → Battery → Repair Procedures

Tightening Torque:

lb-ft	9.1
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lb-in	109
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N.m	13.7
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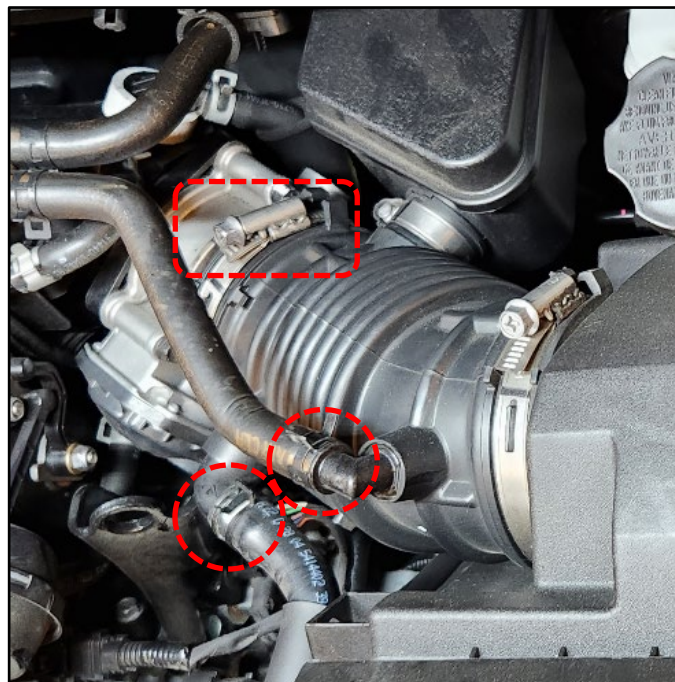
6. Loosen the air intake hose clamp at the throttle body. Remove the hose clamps at the hoses shown, and remove the hoses from the air intake.

Tightening Torque: Air intake hose clamp

lb-ft	2.9
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lb-in	35
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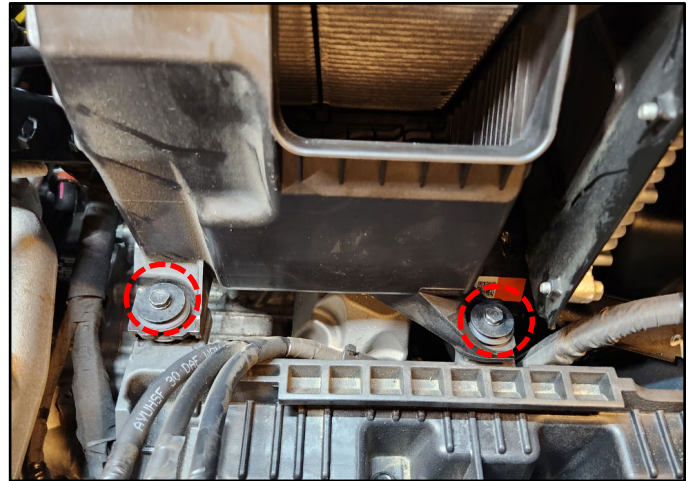
N.m	3.9
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- Remove the air cleaner assembly mounting bolts, and remove the air cleaner assembly.

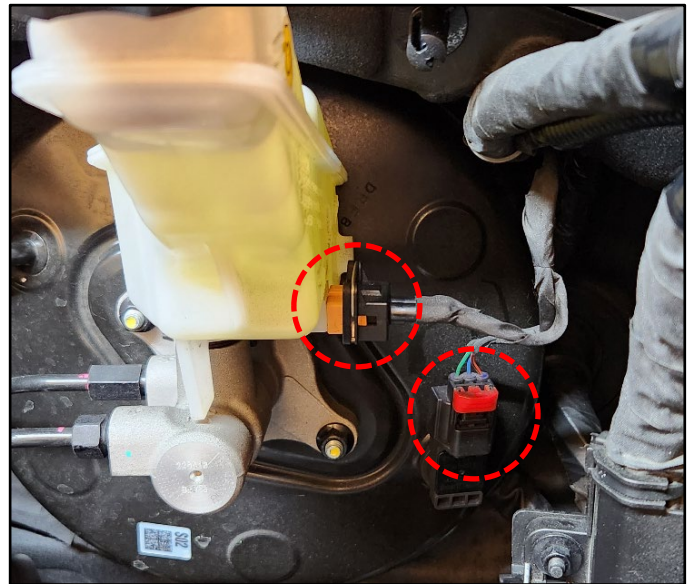
Tightening Torque: Air cleaner mounting bolts

lb-ft	6.5
lb-in	78
N.m	8.8

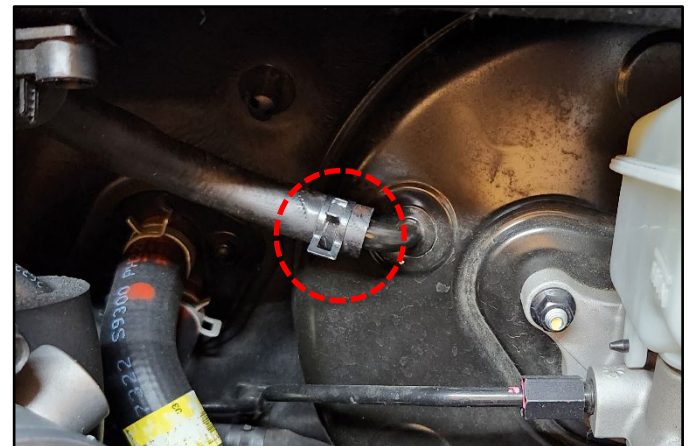


- Disconnect the brake fluid level sensor connector.

Disconnect the brake booster vacuum pressure sensor connector.



- Remove the vacuum hose clamp and pull the vacuum hose off the brake booster.



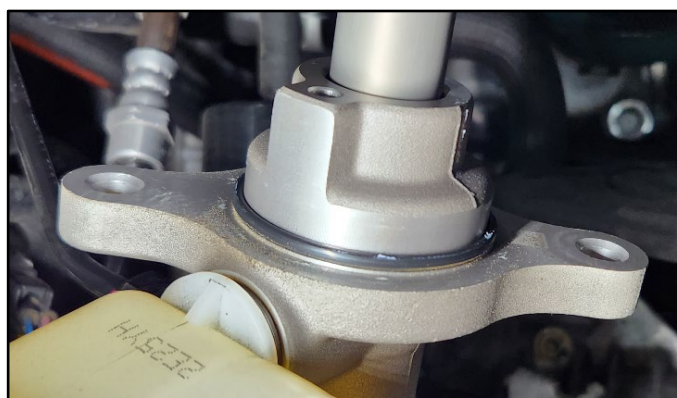
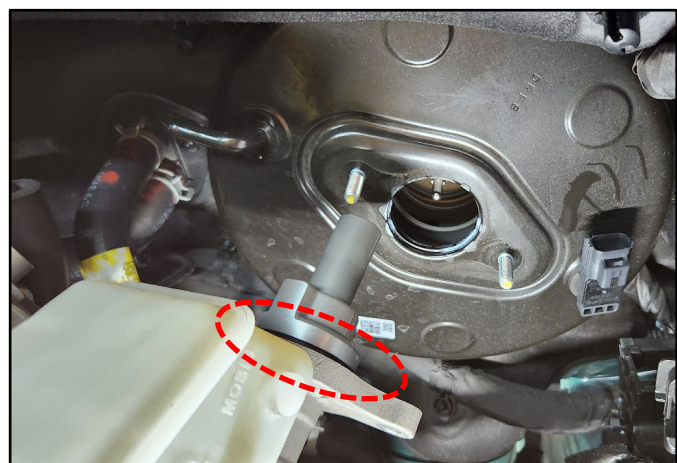
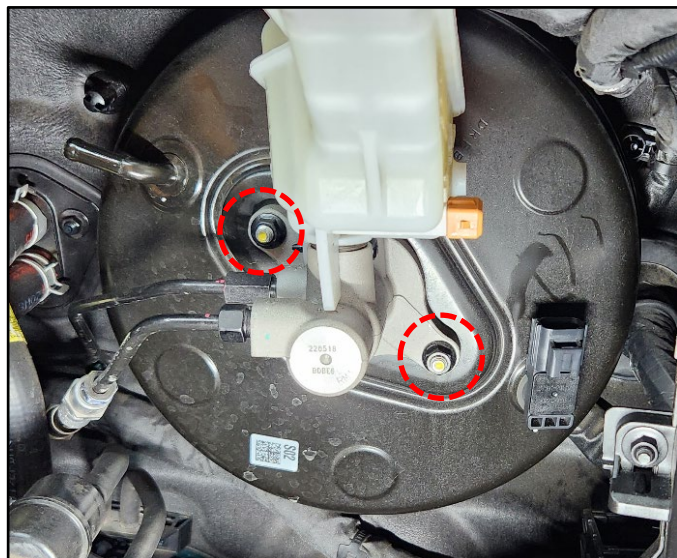
10. Remove the brake master cylinder mounting nuts, and pull the master cylinder off of the brake booster, leaving the brake lines attached.

Tightening Torque: Brake master cylinder mounting nuts

lb-ft	15
N.m	21

NOTICE

- Do not loosen or remove the brake line flare nuts. The brake master cylinder should be pulled off the booster with the brake lines attached.
- Take care not to contaminate the master cylinder with dust or other foreign substances.
- Check for the o-ring between the master cylinder and booster. If the o-ring is stuck to the booster, remove it and place it onto the master cylinder.



11. From the driver's footwell area, remove the retaining snap pin, and the clevis pin from the brake pedal.

NOTICE

- Replace the snap pin in the same (original) position when reassembling.
- If the snap pin is visually deformed, replace it with a new one.
- Apply a thin layer of general purpose grease before installing the clevis pin.



12. Remove the brake booster mounting nuts. Remove the brake booster from the vehicle.

Tightening Torque: Brake booster mounting nuts

lb-ft	16
N.m	21



13. Check the LOT number of the brake booster on the **BACK shell** (brake pedal side of the booster).

STUI



Using STUI, take a photo of the brake booster (back shell) showing the LOT#, and the last 6 digits of the VIN with the date of repair on a piece of paper.

- If the LOT# is **“DSA2”**
 - An additional STUI image showing the new booster LOT#, VIN, and date must be submitted.
- If the LOT# is **not “DSA2”**
 - Only 1 STUI image of the original booster is required.

Upload the photo(s) to STUI.

- If the LOT number is “DSA2”, replace the brake booster with a new one.
- For all other LOT numbers, reinstall the original brake booster.

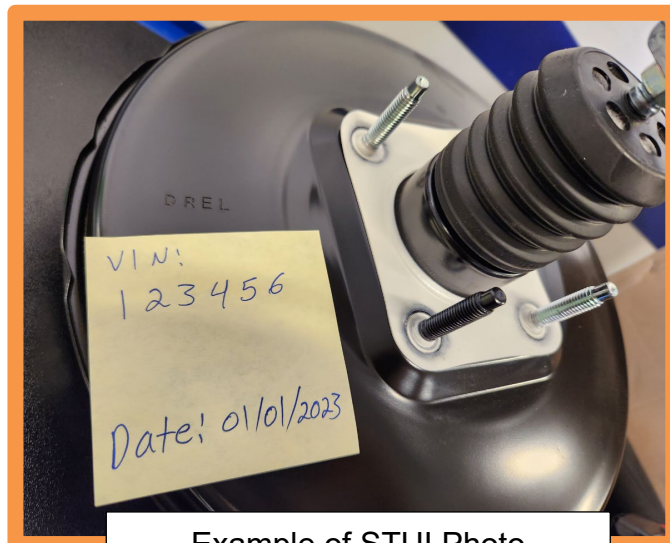


Information

There are two LOT #s on each brake booster. One on the front shell, one on the back shell. **Check the LOT# on the back shell.**

NOTICE

Never install a brake booster that has been dropped.



Example of STUI Photo



14. Install the brake booster in reverse order of removal.

NOTICE

- Take care to seat the o-ring uniformly when installing the master cylinder by walking/wiggling the master cylinder into place.

15. After installing the brake booster, check for the following:

- Inspect brake lines for any signs of brake fluid leak.
- Inspect the brake vacuum lines for proper connection and leaks.
- Inspect the booster leaks or other issues.

16. Confirm proper brake booster operation by performing the following three tests.

Test #1

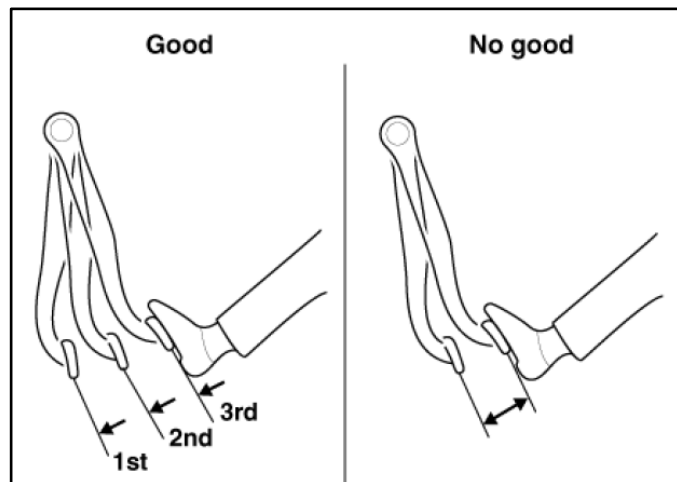
- 1) Start engine and idle for 15 seconds.
- 2) Check for any brake warning lamp illumination.
- 3) Shut engine off.
- 4) Depress the brake pedal fully and note the depressed pedal position.
- 5) Release the brake pedal and depress again, noting the pedal position again.
- 6) Repeat step 4.

Booster operation is normal if the brake pedal position rises higher with each application of the brake pedal.

Test #2

- 1) With the engine off, step on the brake pedal and release several times.
- 2) Press the brake pedal and hold, then start the engine.

The pedal should drop slightly. If there is no change in pedal height, the booster is inoperative.



Test #3

- 1) Start and idle the engine.
- 2) Depress the brake pedal and hold.
- 3) Shut off the engine.
- 4) Hold the pedal depressed for 30 seconds.

If the pedal height does not change, the booster is operating properly. If the pedal rises, the booster is inoperative.

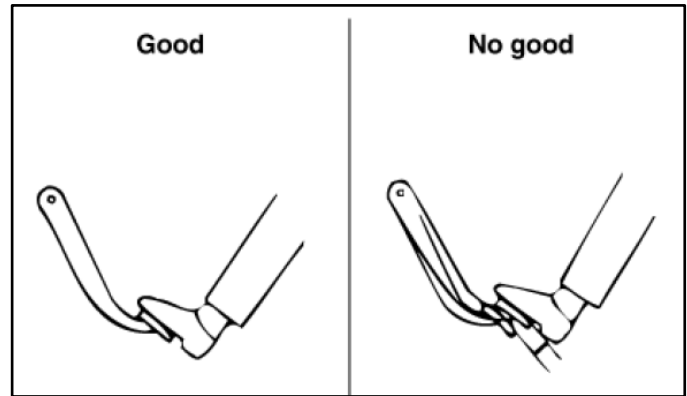
If all three tests are good, the booster is operating properly.

If any of the tests do not pass, check for proper installation of the booster and vacuum lines.

**Information**

Refer to the service manual for details on brake booster operation inspection:

Brake System → Brake System → Brake Booster → Repair Procedures



17. After confirming proper brake operation, reset customer radio presets.

The service procedure is now complete.