



Technical Service Bulletin

GROUP CAMPAIGN	NUMBER 22-01-094G
DATE DECEMBER 2022	MODEL(S) G70 (IK)

SUBJECT: HYDRAULIC CONTROL UNIT AIR BLEEDING
(SERVICE CAMPAIGN T31G)

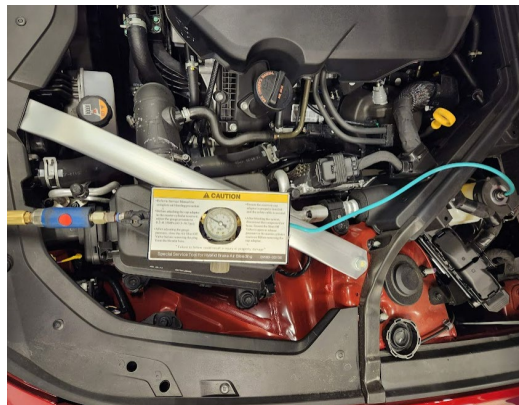
* IMPORTANT

*****DEALER STOCK ONLY*****

Dealers must perform this service campaign on all affected vehicles prior to customer retail delivery.

Access the "Warranty Information" screen via WEBDCS to identify open campaigns.

Description: This bulletin describes the procedure to perform an Hydraulic Control Unit (HCU) Air Bleeding on certain 2023MY G70 (IK) models to reduce the soft brake pedal feel.



Applicable Vehicles: Certain 2023MY G70 (IK) produced from April 02, 2022 to June 02, 2022


STUI





This TSB includes STUI pictures as a requirement. Where indicated, please include the last 6 digits of the VIN and date of repair on a piece of paper. Ensure the VIN and date of repair are clearly visible. Finally, please ensure all captured pictures are completed according to the steps in this TSB and uploaded to STUI. All claims submitted that have illegible, incomplete, missing, or incorrect picture(s) are subject to debit.

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair


Parts Information:

Part Number	Part Description	Photo	Remarks
00232-19053	DOT 4 Brake Fluid (12 FL.OZ., 355ML)		Requires approximately 1 1/4 bottles (16 FL.OZ.) of brake fluid per vehicle

Special Service Tools:

Part Number	Tool Name	Photo	Remarks
09580-3D100	Brake Air Bleeding Tool		-
0K585-E8100	Brake Air Bleeding Tool Adapter		-

Recommended Tools and Equipment:

Tool Name	Photo	Remarks
Brake Fluid Catch Can with a Clear Tube		<ul style="list-style-type: none"> • Use a clear tube to view air bubbles exiting the caliper. • The catch can should be partially filled with brake fluid.

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
G70 (IK)	20D173R0	BRAKE AIR BLEEDING OPERATION (ABS)	0.6 M/H	58920-G9BE0	D75	ZZ3

NOTE 1: Submit claim on Campaign Claim Entry screen.

NOTE 2: If a part is found in need of replacement while performing the repair for this campaign 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: 2 bottles of brake fluid will be reimbursed under labor op 20D173R0.

NOTE 4: Op time includes taking STUI pictures and uploading. The STUI photos must be taken as directed on page 12. **If not included, claim will be subject to debit.**

NOTICE

- Do not reuse drained fluid.
- Always use genuine DOT4 brake fluid. Using non-genuine DOT4 brake fluid can cause corrosion and decrease the life of the brake system.
- Verify that dirt or other foreign matter does not contaminate the brake fluid.
- Do not spill brake fluid onto the vehicle. This may lead to paint damage. If brake fluid contacts any paint surface, wash the surface off immediately with water.
- The reservoir on the master cylinder must be at the MAX (upper) level mark at the start of bleeding procedure and checked after bleeding each brake caliper. Add fluid as required.

Service Procedure:

This procedure requires a two-step bleeding process:

1. Manual Brake Bleeding
2. GDS-M HCU Air Bleeding

Manual Brake Bleeding

1. Lift the vehicle on a hoist and remove all four wheel/tire assemblies.

Wheel Lug Nut Tightening Torque

lb-ft	• 65.1-79.6
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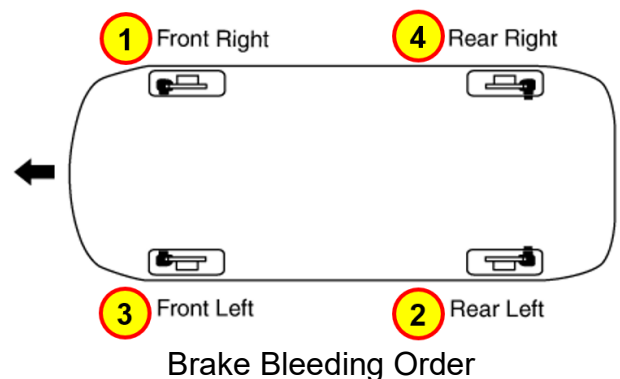
kgf.m	• 9.0-11.0
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N.m	• 88.3-107.9
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NOTICE

- Ensure the brake fluid in the master cylinder reservoir is at the MAX (upper) level mark.
- Check the master cylinder reservoir after bleeding each brake caliper. Add fluid as required to the MAX (upper) level mark.

2. Start at the **Front Right** brake caliper.



- Connect the hose of the catch can to the bleed screw (A) of the caliper.

NOTICE

For Brembo calipers, bleed the inner bleed screw first, then bleed the outer.

Bleed Screw Tightening Torque

Standard Brakes (17in rotor)

lb-ft	• 5.1-9.4
kgf.m	• 0.7-1.3
N.m	• 6.9-12.7

Mando Brakes (18in rotor)

lb-ft	• 10.1-14.5
kgf.m	• 1.4-2.0
N.m	• 13.7-19.6

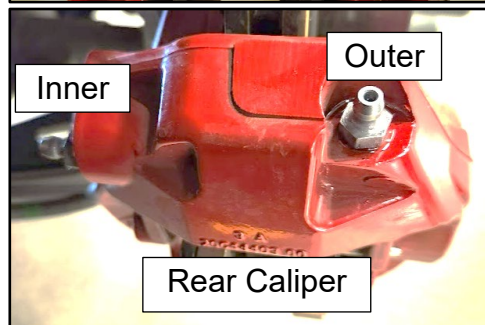
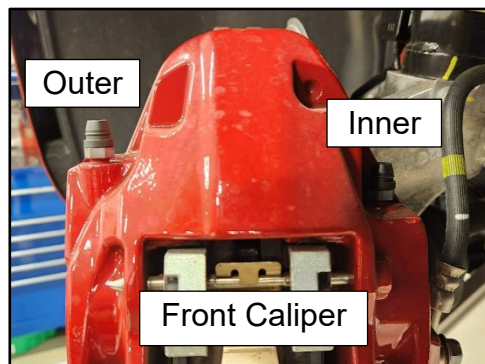


Brembo Brakes (18in rotor)

lb-ft	• 12.3-14.5
kgf.m	• 1.7-2.0
N.m	• 16.7-19.6



Brembo



4. Have an assistant pump the brake pedal at least three times and then hold the pedal down.

While the brake pedal is down, open the bleed screw to release the brake fluid.

After the fluid and bubbles have been released from the caliper, tighten the bleed screw. Then have the assistant release the brake pedal.

Repeat until bubbles are no longer visible in the catch can hose.

Check the master cylinder reservoir level. Add brake fluid as necessary.

5. Move to the **Rear Left** and repeat the procedures in steps 3 and 4.

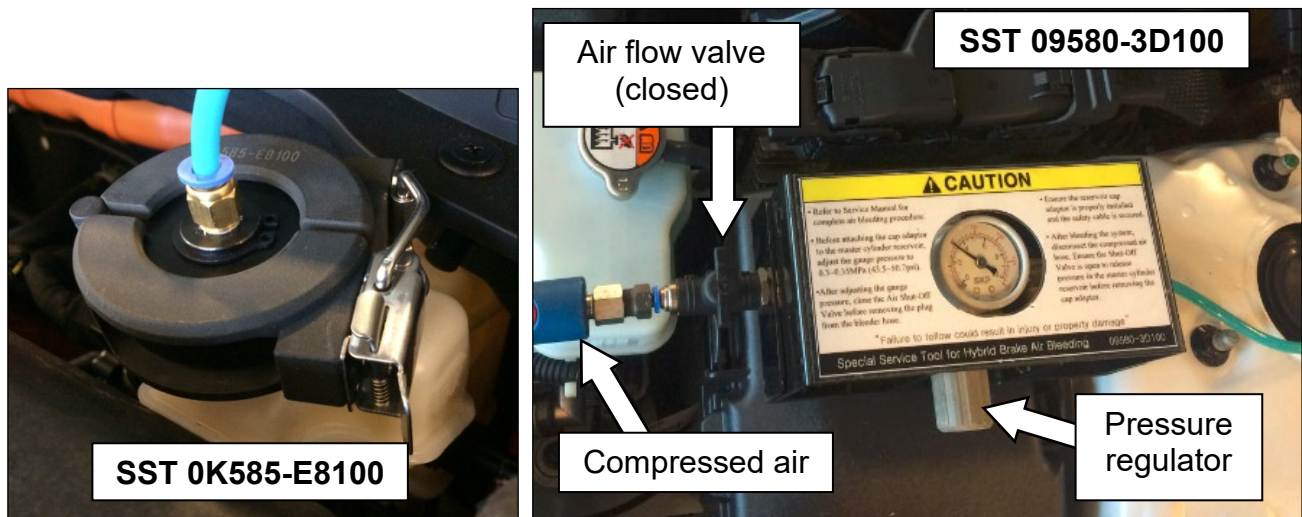
Repeat the procedures in steps 3 and 4 for the **Front Left** then the **Rear Right**.

6. Refill the master cylinder reservoir to MAX (upper) level line.

Continue to GDS-M HCU Air Bleeding.

GDS-M HCU Air Bleeding

1. With the air flow valve closed (as shown in image below), connect pressurized brake bleeder tool (09580-3D100) to the brake fluid reservoir using the adapter (0K585-E8100).

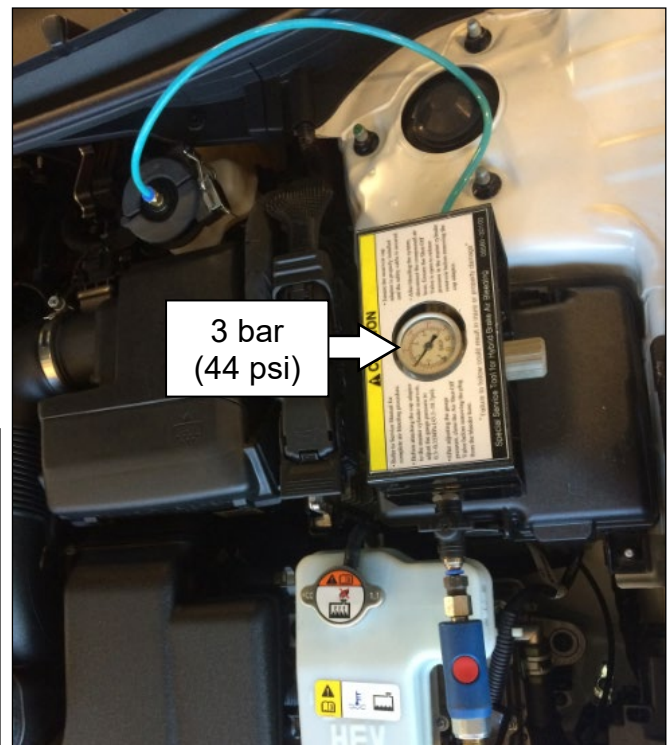


2. With the air flow valve closed, connect a compressed air source. Regulate the air pressure on the brake bleed tool to 3 bar (approximately 44 psi). Open the air flow valve to pressurize the brake system.

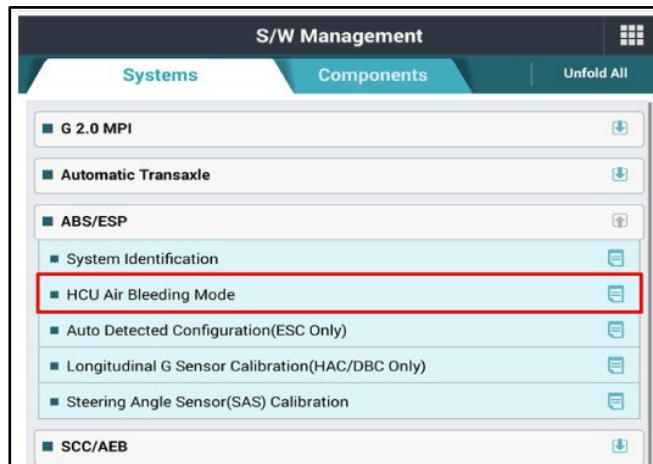
After the system is pressurized, inspect the master cylinder reservoir, brake lines and fittings for leaks. Repair any leaks found before continuing with bleeding procedure.

NOTICE

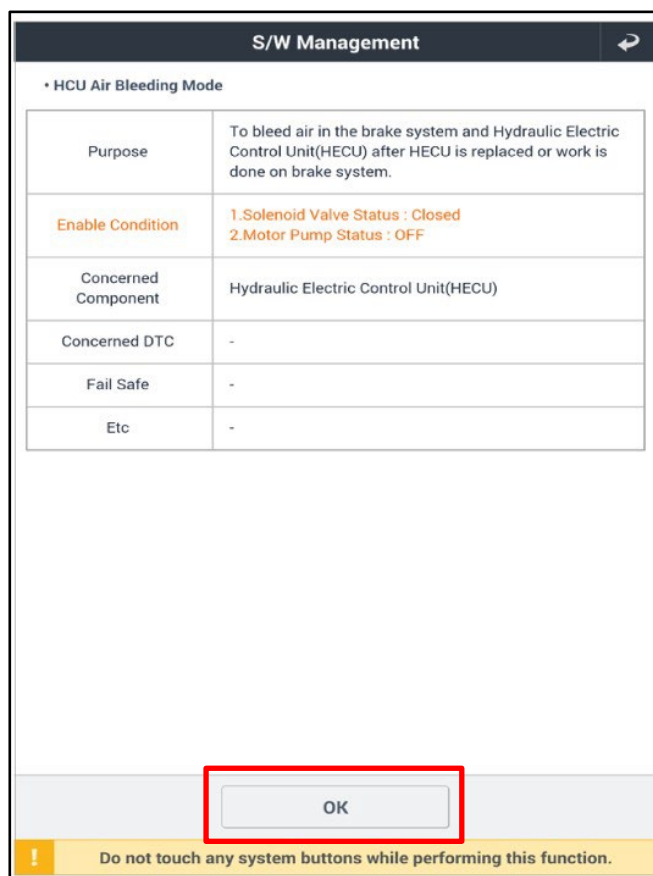
- Always keep the air flow valve closed when connecting to a compressed air source. Open the air flow valve as the last step.
- Close the air flow valve first before removing the compressed air source.
- To remove the adapter from the master cylinder:
 1. Close the air flow valve.
 2. Remove the compressed air source.
 3. Slowly open the air flow valve to release the pressure from the tool.
 4. Remove the adapter.



- 3. Connect the GDS-M to the vehicle and select the “HECU Air Bleeding Mode” from “S/W Management”.

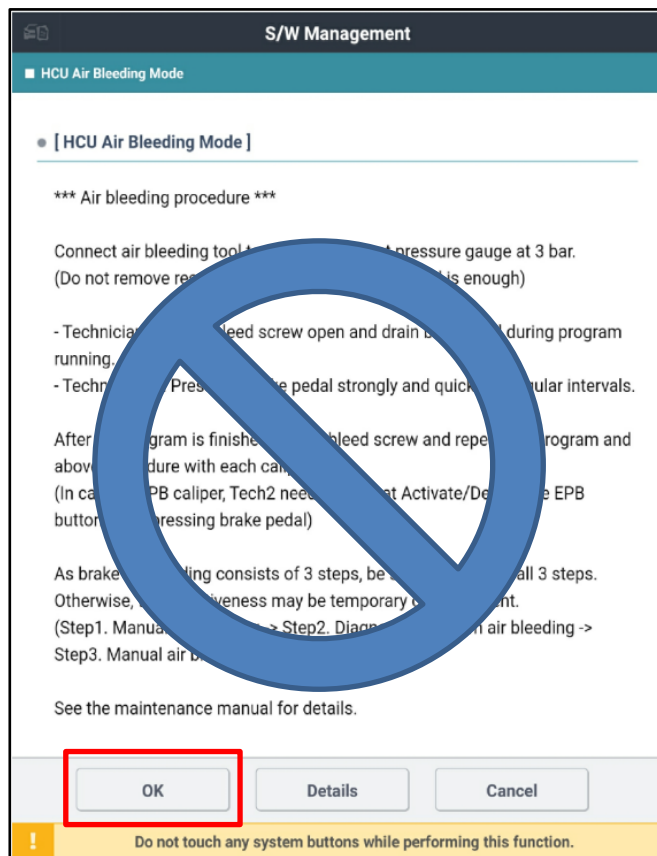


- 4. Press the “OK” button.

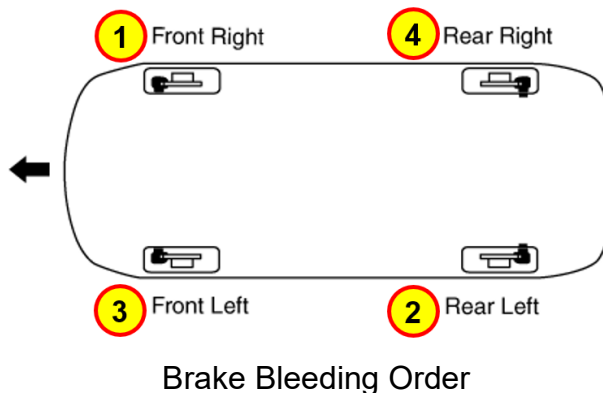


- 5. **Do not** follow the procedures stated in the GDS-M.

Press the “OK” button.



- 6. Start at the **Front Right** brake caliper.



- 7.. Connect the hose of the catch can to the bleed screw (A) of the caliper and open the bleed screw.

NOTICE

For Brembo calipers, bleed the inner bleed screw first, then bleed the outer.

Bleed Screw Tightening Torque

Standard Brakes (17in rotor)

lb-ft	• 5.1-9.4
kgf.m	• 0.7-1.3
N.m	• 6.9-12.7

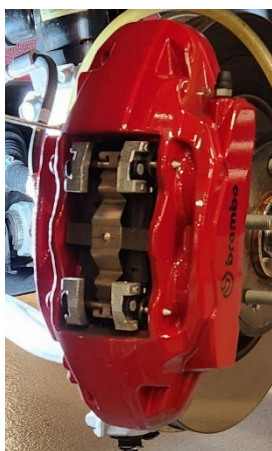
Mando Brakes (18in rotor)

lb-ft	• 10.1-14.5
kgf.m	• 1.4-2.0
N.m	• 13.7-19.6

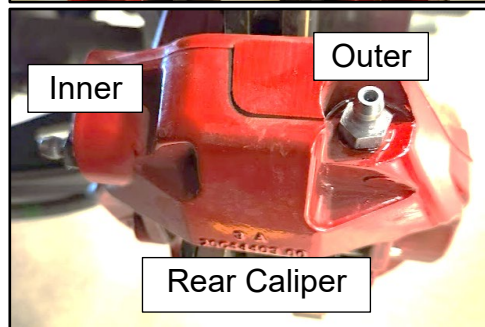
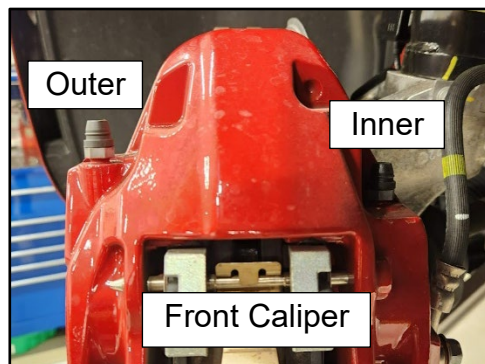


Brembo Brakes (18in rotor)

lb-ft	• 12.3-14.5
kgf.m	• 1.7-2.0
N.m	• 16.7-19.6



Brembo

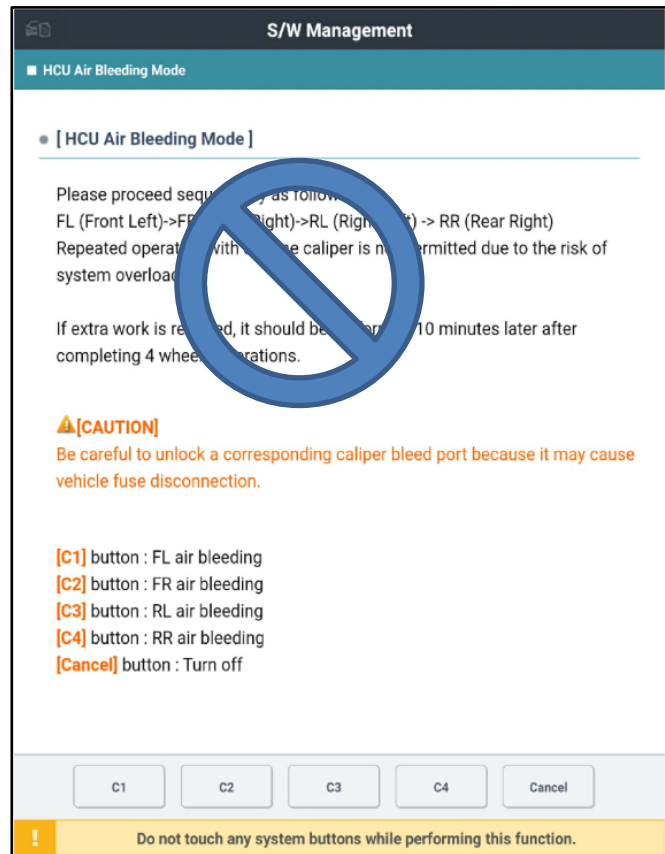


8. **Do not** follow the procedures stated in the GDS-M.

Press the appropriate, C1 to C4, button for the caliper to begin air bleeding.

Air bleeding starts with the sound of the motor.

The motor will activate for 10 seconds, pause, then activate again for a total of 20 seconds.



9. Watch for air bubbles coming out of the caliper through the catch can tube.

If bubbles are still present after the HCU motor stops, restart the HCU bleeding procedure for that wheel position.

NOTICE

For Brembo calipers, bleed the inner bleed screw first, then bleed the outer.

If bubbles are no longer present after the HCU motor stops, tighten the bleed screw to specification.

NOTICE

Always maintain proper brake fluid level in the master cylinder reservoir.

10. Move to the **Rear Left** caliper.

Repeat the procedures from steps 7 to 9 in this GDS-M HCU Air Bleeding section.

Ensure the correct button is pressed for each caliper position.

⚠️ [CAUTION]
Be careful to unlock a corresponding caliper bleed port because it may cause vehicle fuse disconnection.

[C1] button : FL air bleeding
[C2] button : FR air bleeding
[C3] button : RL air bleeding
[C4] button : RR air bleeding
[Cancel] button : Turn off

11. Repeat the procedures from steps 7 to 9 in this GDS-M HCU Air Bleeding section for the **Front Left** then the **Rear Right**.

12. At the completion of the HCU Air Bleeding at the **Rear Right** caliper and before removing the catch can, follow the STUI photo procedure.



Using STUI, take clear photos of the following two items with the last 6 digits of the VIN and the date of repair on a piece of paper. See examples shown to the right.

1. Catch can connected to the **Rear Right** caliper.
2. Brake air bleeding tool connected to the master cylinder reservoir.

Upload the photos to STUI.



13. After HCU Air Bleeding is complete, ensure the brake fluid in the master cylinder reservoir is at the MAX (upper) level line.

14. Reinstall all four tire/wheel assemblies.

15. The service procedure is now complete.