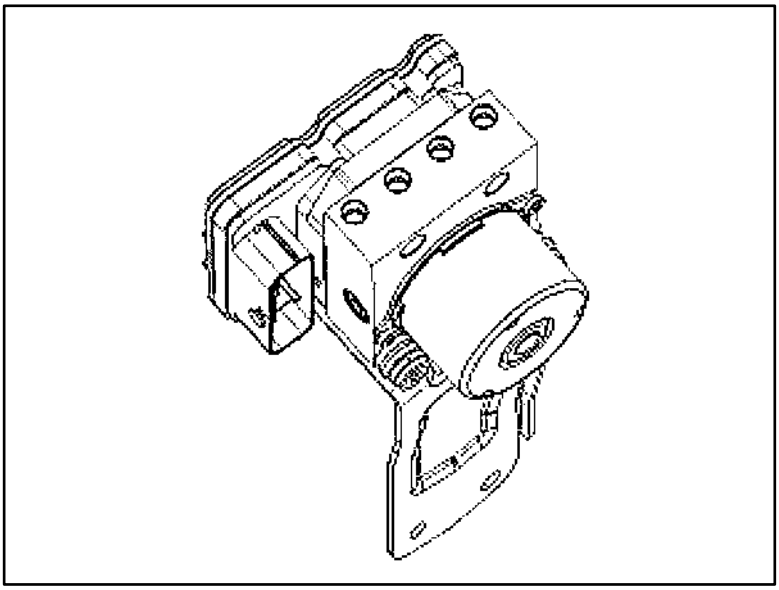
	GROUP	MODEL
	CHA	**2020MY~ Soul (SK3)**
	NUMBER	DATE
	104	**May 2020**

TECHNICAL SERVICE BULLETIN

SUBJECT:

BRAKE AIR BLEEDING PROCEDURE FOR ESC HONKING NOISE

This bulletin provides information regarding the brake air bleeding procedure for 2020MY~ Soul (SK3) vehicles equipped with Electronic Stability Control (ESC) module which may exhibit a "honk" noise when using Idle Stop and Go (ISG) and/or Hill Start Assist Control (HAC). Follow the procedure outlined in this bulletin to perform air bleeding brake procedures below:



Electronic Stability Control (ESC) Module

Circulate To: ☒ **General Manager** ☒ **Service Manager** ☒ **Parts Manager**
☒ **Service Advisors** ☒ **Technicians** ☒ **Body Shop Manager** ☒ **Fleet Repair**

SUBJECT: BRAKE AIR BLEEDING PROCEDURE FOR ESC HONKING NOISE

Repair Procedure:

ⓘ IMPORTANT

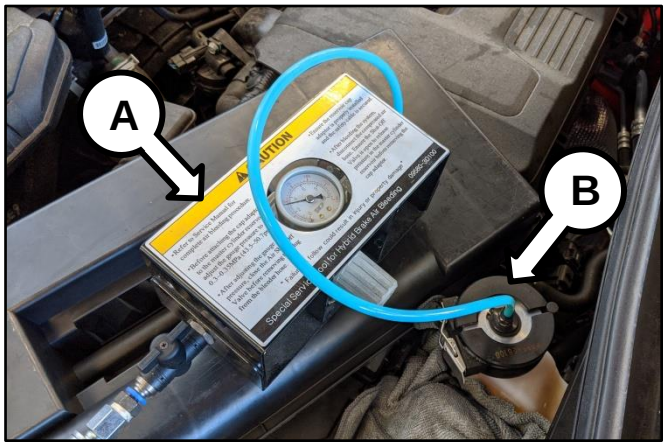
This procedure is to be performed by two (2) people:

Technician - Bleeds the system by manually opening and closing the brake caliper bleed screw and detects air coming out of the brake line.

Assistant - Operates KDS and brake pedal operation inside the vehicle.

1. Lift the vehicle on hoist and remove all four (4) wheels.

2. Connect the **SST 09580 3D100** (A) and **SST 0K585 E8100** (B) to the vehicle, and adjust the gauge pressure to 3 bar (43.5 psi).



⚠ CAUTION

Before bleeding, inspect the brake lines and verify no brake line fluid leaks are present.

Always use genuine DOT 4 brake fluid from a sealed container. Do not reuse the drained fluid.

Check that the brake fluid reservoir is always filled. Do not allow the brake fluid master to run out of fluid while performing air bleeding.

Ensure no dirt or foreign matter contaminates the brake fluid.

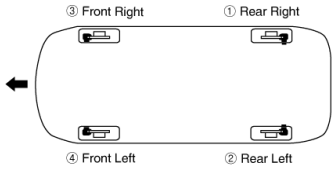
Avoid brake fluid contact with painted surfaces, as damage may occur.

Verify the assistant has the brake pedal pressed down and holds before the main worker opens/closes the caliper air bleeder screw.

Conventional Air Bleed Procedure (apply **normal** brake pedal force)

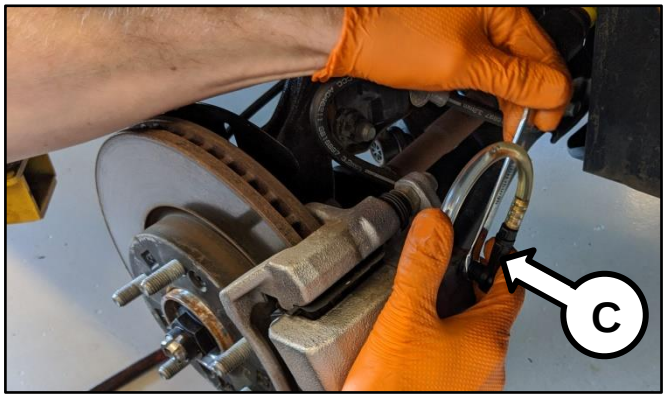
Follow the air bleeding order for each wheel (start with the right rear wheel, end with the left front wheel **and** monitor the brake fluid reservoir level after each wheel is bled:

1) Right Rear
2) Left Rear
3) Right Front
4) Left Front



3. **Technician** – using a clear hose, connect one end to the brake caliper bleed screw (C) and the other submerged in an empty container.

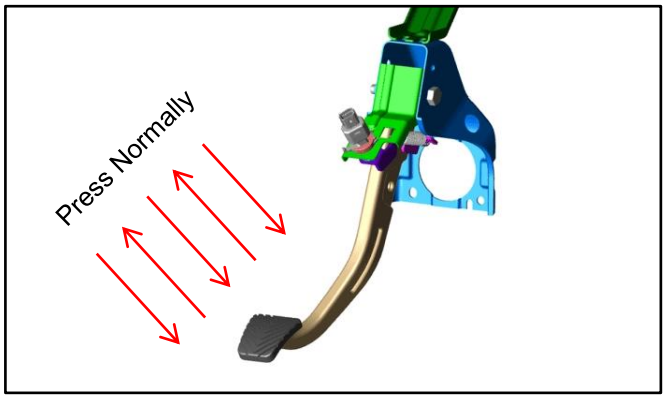
   Note: Ensure that the bleed screw is closed/tightened before proceeding.



4a. **Assistant** – Apply **normal** brake pedal force by following the instruction below:

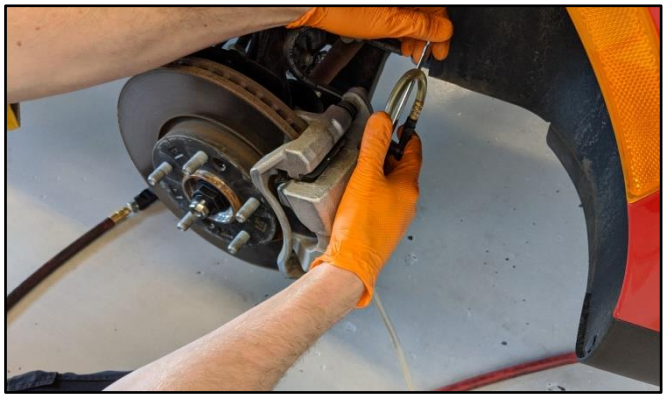
- Press and release
- Press and release
- Press and hold the brake pedal

4b. Verbally notify out "stand by" to the technician.



5a. **Technician** – While assistant holds the brake pedal pressed down, slowly loosen the air bleeding screw and allow the fluid to release. Closely monitor for air bubbles by observing the fluid movement within the hose.

5b. Have the assistant verbally notify technician the pedal has bottomed out, then tighten the air bleed screw.



6. Repeat steps 4 - 5 as needed, until air bubbles are no longer visible.

7. Repeat steps 3 - 6 for the remaining three (3) brake calipers.

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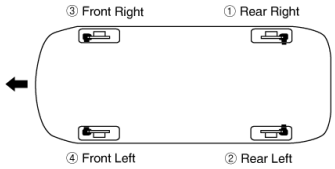
Panic Brake Mode Air Bleed Procedure (apply **strong** brake pedal force)

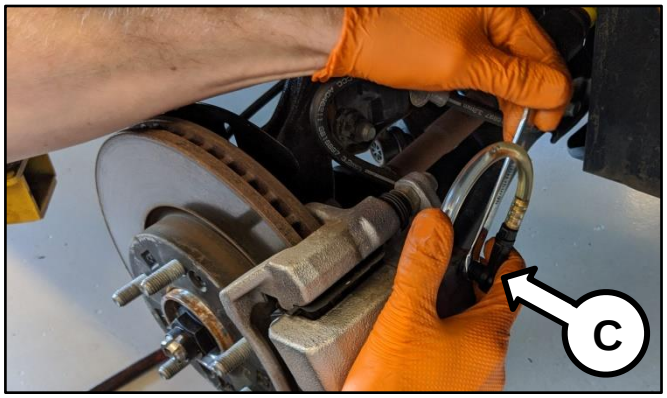
Follow the air bleeding order for each wheel (start with the right rear wheel, end with the left front wheel **and** monitor the brake fluid reservoir level after each wheel is bled:

1) Right Rear
2) Left Rear
3) Right Front
4) Left Front



8. **Technician** – using a clear hose, connect one end to the brake caliper bleed screw (C) and the other submerged in an empty container.

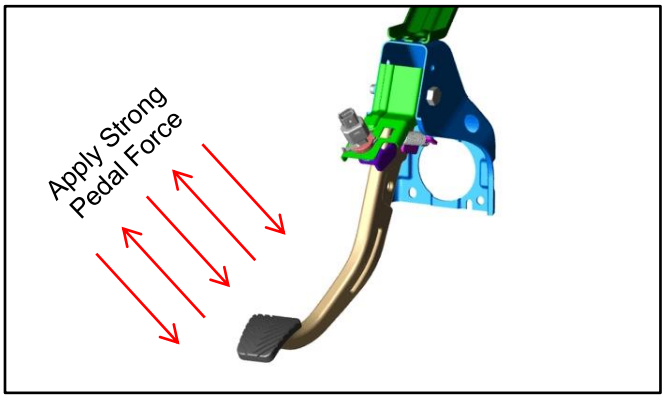
   Note: Ensure that the bleed screw is closed/tightened before proceeding.



9. **Assistant** - Repeat step 4, this time apply **strong** pedal force instead.

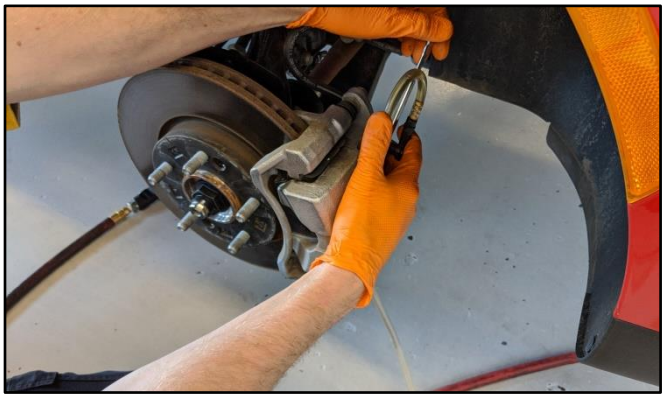
⚠ CAUTION

Check the brake fluid reservoir is always filled. Do not allow the reservoir to run out of fluid while performing air bleeding.



10. **Technician** – While assistant holds the brake pedal pressed down, slowly loosen the air bleeding screw and allow the fluid to release. Closely monitor for air bubbles by observing the fluid movement within the hose.

    Have the assistant verbally notify technician the pedal has bottomed out, then tighten the air bleed screw.



11. Repeat steps 9 - 10 as needed, until air bubbles are no longer visible.

12. Repeat steps 8 - 11 for the remaining three (3) brake calipers.

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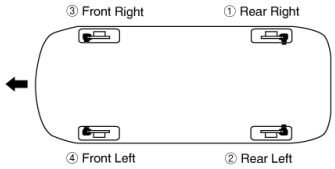
HCU Forced Operation Mode (using KDS)

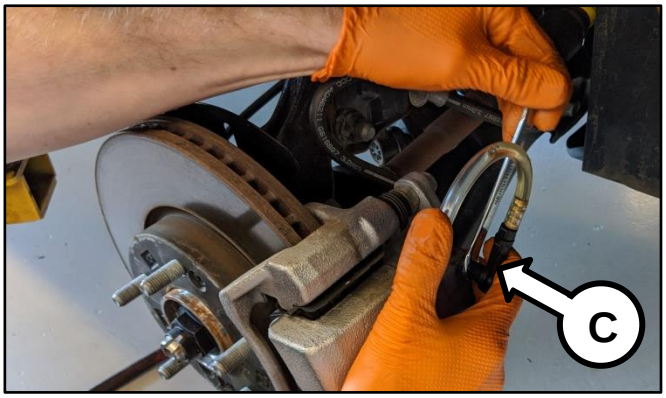
Follow the air bleeding order for each wheel (starting with the right rear wheel and ending with the left front wheel) **and** monitor the brake fluid reservoir usage after each wheel is bled:

1) **Right Rear**
2) **Left Rear**
3) **Right Front**
4) **Left Front**



13. **Technician** – using a clear hose, connect one end to the brake caliper bleed screw (C) and the other submerged in an empty container.

    Note: Ensure that the bleed screw is closed/tightened before proceeding.

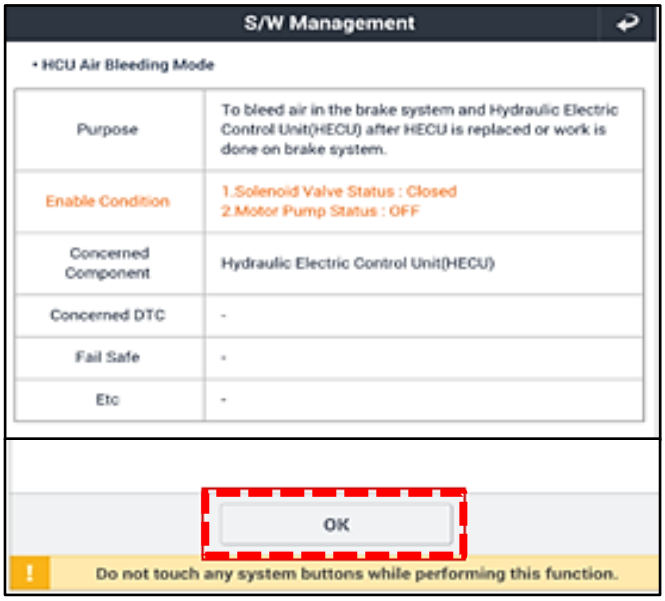


14. **Assistant** – In the S/W Management using KDS, select **'HCU Air Bleeding Mode'** in the ABS/ESP system.

Notify the **Technician** before starting and select **'OK'**.

⚠ CAUTION

Check the brake fluid reservoir is always filled. Do not allow the reservoir to run out of fluid while performing air bleeding.



15. Perform the following steps simultaneously as outlined:

    a) **Technician** - Open the bleed screw as the HCU is operated by KDS.

    b) **Assistant** - Press down on the brake pedal with strong force at regular intervals while HCU is operated by KDS.

    c) **Technician** - Proceed with air bleeding until the air bubbles are no longer present.

    d) **Assistant** - When HCU forced operation is completed, verbally notify the technician to stop.

    e) **Technician** – Tighten the caliper bleed screw.

16. Repeat step 15 for the remaining three (3) wheels to complete the HCU Forced Operation Mode.

17. Repeat the **Conventional Air Bleed Procedure** on page 3.

18. Repeat the **Panic Brake Mode Air Bleed Procedure** on page 4.

19. Check the brake pedal stroke.

    If the brake pedal stroke **does not** meet the specification, repeat steps 17 and 18.

    If the brake pedal stroke **does** meet the specification, remove the SST to complete the air bleeding procedure.

    Brake Pedal Stroke Specification:
    5.3149 ± 0.1181 in. (135 ± 3mm)

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AFFECTED VEHICLE RANGE:

Model	Production Date Range
Soul (SK3)	November 1, 2018 ~

REQUIRED TOOL:

Tool Name	Figure	Comments
SST 09580 3D100		Located in SST Cabinet Drawer #7
SST 0K585 E8100		

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Brake Fluid	UM010 CH043		3 (Max.)

WARRANTY INFORMATION:

N Code: Q41 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	58910 K0100	0	ESC System Air Bleeding	58670F04	1.7 M/H	N/A	0