



# Technical Service Bulletin

GROUP <b>CAMPAIGN</b>	NUMBER <b>25-01-063H</b>
DATE <b>SEPTEMBER 2025</b>	MODEL(S) <b>SEE BELOW</b>

**SUBJECT:** COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE (SERVICE CAMPAIGN T9E)

This TSB supersedes 23-01-049H to add all components of the Coolant Flushing Equipment Set to the SST Information table on pages 2 & 3, so these parts may be ordered separately if needed, and to revise the causal part in the Warranty Information table on page 4.

**★ IMPORTANT**

Dealers must perform this service campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

Access the “Vehicle Information” screen via WebDCS to identify open campaigns.

**Description:** Certain IONIQ Electric (AE EV) and Kona Electric (OS EV) vehicles may exhibit a restricted coolant flow condition, which may be accompanied by a warning message (e.g., Coolant Supplement, Refill Inverter Coolant) in the cluster. No related DTCs are stored, and coolant level is normal in the reservoir tank. The coolant flow may be restricted by debris, causing abnormally high Electric Water Pump (EWP) speed. This TSB contains instructions for confirming high RPMs in the EWP, then using the Coolant Flushing Equipment Set to flush and clean debris from the various cooling system circuits. The coolant will be replaced with the updated Electric Vehicle Battery System Coolant (BSC-2) low-conductivity blue coolant.

**i Information**

This bulletin applies **ONLY** to vehicles with the low-conductivity blue coolant. If coolant is pink or green, then this bulletin does **NOT** apply.

To ensure proper understanding of the service procedure and equipment connections, it is recommended to view or print this bulletin in **color**.

**Applicable Vehicles (Certain):**

Model Year	Model	Production Dates
2020 - 2021	IONIQ Electric (AE EV)	11/01/2019 - 05/17/2021
2019 - 2022	Kona Electric (OS EV)	05/07/2019 - 10/12/2021

**NOTICE**







To avoid any potential damage to IONIQ vehicles, this service campaign can only be performed at IONIQ certified dealers.

**SUBJECT:****COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
(SERVICE CAMPAIGN T9E)****Parts Information:**

Model	Part Name	Part Number	Figure	Remarks
IONIQ Electric (AE EV) Kona Electric (OS EV)	Electric Vehicle Battery System Coolant (BSC-2)	00232-19113		QTY: 3 gallons per vehicle  <ul style="list-style-type: none"> <li>• Coolant is <b>blue</b> in color</li> <li>• Shelf life is 2 years</li> <li>• Immediately use entire contents after opening</li> </ul>











**NOTE:** For proper use and application refer to vehicle owner's manual.

**SST Information:**

Tool Name	Tool Number	Figure	Remarks
Coolant Flushing Equipment Set	KQ253-CV158QQH		Each dealer was previously shipped one Coolant Flushing Equipment Set at the start of this service campaign. Additional units may be purchased through the normal parts ordering process via WebDCS.
<b>Coolant Flushing Equipment Set Components:</b>			
110V Motor Pump Kit	KQ253-CV159QQH		If necessary, individual components may be purchased through the normal parts ordering process via WebDCS.
Filter Housing Kit	KQ253-CV160QQH		
Stainless Filter	KQ253-CV161QQH		
Filter Gasket	KQ253-CV162QQH		
18L Water Bottle Kit	KQ253-CV163QQH		

**SUBJECT:** COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
(SERVICE CAMPAIGN T9E)

**SST Information (continued):**

Tool Name	Tool Number	Figure	Remarks
Joint Adapter Kit	KQ253-CV164QQH		If necessary, individual components may be purchased through the normal parts ordering process via WebDCS.
Air Pressure Regulator Kit	KQ253-CV165QQH		
Air Toggle Switch Kit	KQ253-CV166QQH		
Check Valve Kit	KQ253-CV167QQH		
2 Way Ball Valve	KQ253-CV168QQH		
Spring Hose (3 M long)	KQ253-CV169QQH		
Hose Band Clamp	KQ253-CV170QQH		
Caster Wheel	KQ253-CV171QQH		
Adapter A	KQ253-CV172QQH		
Adapter B	KQ253-CV173QQH		

**SUBJECT:** COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
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**Warranty Information:**

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
IONIQ Electric (AE EV)	20D140R4	Debris Discharge and Coolant Change (without Heat Pump)	1.9 M/H	36910-0E500	E83	ZZ5
	20D140R5	Debris Discharge and Coolant Change (with Heat Pump)	2.0 M/H			
Kona Electric (OS EV)	20D140R6	Debris Discharge and Coolant Change	1.9 M/H	36910-0E650		

**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 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:** This TSB includes repair validation photos. Op times include VIN, mileage, and repair validation photo(s) as outlined in the Digital Documentation Policy.

**Service Procedure:**

**DIGITAL DOCUMENTATION**



This TSB includes repair validation photos. Refer to the latest Warranty Digital Documentation Policy for requirements.

**⚠ WARNING**

When servicing the high voltage system, follow all safety precautions in the shop manual to prevent electric shock or leakage accidents:

- **General Information > General Safety Information and Cautions**
- **General Information > High Voltage Shut-off Procedures**

Serious injury may occur from electric shock if these procedures are **NOT** followed.

When connecting or disconnecting hoses or operating coolant cleaning equipment, always wear appropriate eye protection to avoid accidental discharge into your eyes. Serious injury may occur from coolant leaks under pressure or accidental discharge .

To securely connect the equipment hoses, use the existing coolant hose clamps at the identified locations on the vehicle as the equipment flushes coolant under pressure.

**NOTICE**

Applying the recommended torque to all fasteners is essential to reduce potential issues from occurring after the service procedure.



**Information**

Refer to the QR code or link below for guided video information:

[Campaign T9E Service Procedure](#)

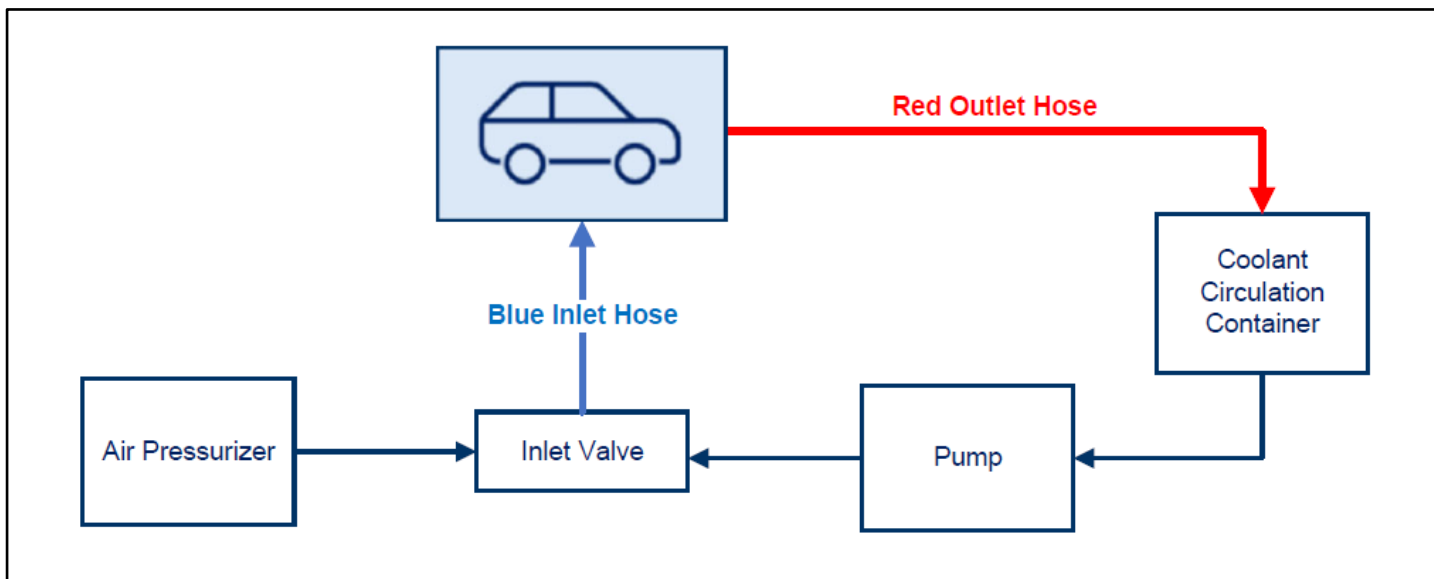
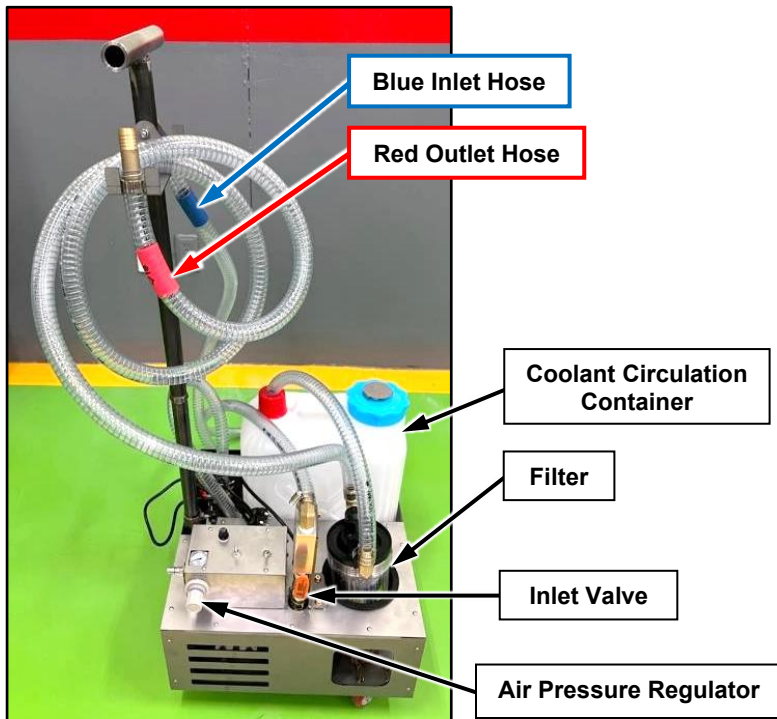


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**General Operating Instructions for Coolant Flushing Equipment**

Coolant Flushing Equipment Setup

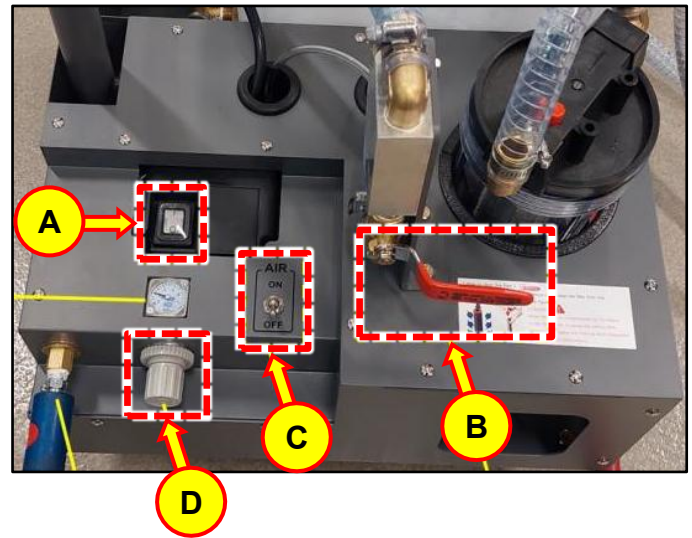


### Coolant Discharge (Air Draining)

1. Perform coolant discharge (also known as air draining) by setting the equipment as follows:
  - Coolant pump (A): **OFF**
  - Inlet valve (B): **CLOSED**
  - Air (C): **ON**

#### **i** Information

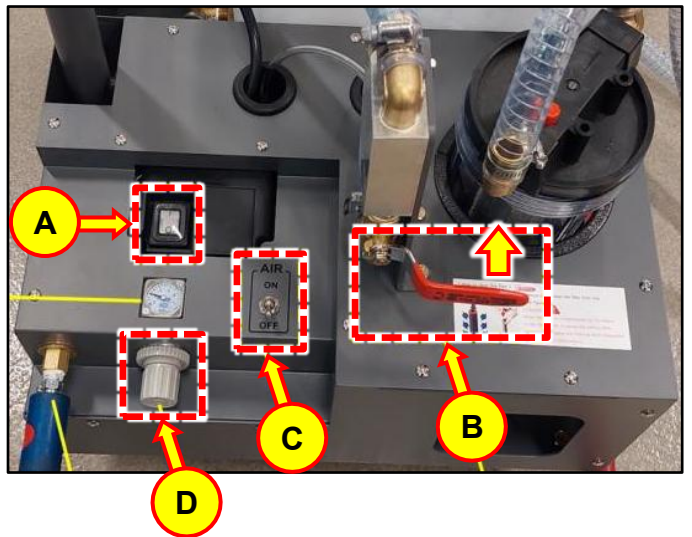
These settings will prevent air from flowing back and interfering with coolant recovery.



2. Set air pressure (D) to **2 bar (29 psi)** for initial discharge. If drainage is insufficient, adjust air pressure up to **3 bar (43.5 psi)**.

### Coolant Circuit Cleaning

1. When flushing and filtering the vehicle's coolant circuit, set the equipment as follows:
  - Pump (A): **ON**
  - Inlet valve (B): **ON**
  - Air (C): **ON**
  - Air pressure (D): Set to **2 bar (29 psi)**
2. Ensure the coolant circulation container always contains at **least 8L (2 gal / half full)** of fluid. This can include a mixture of tap water, distilled water, and coolant (BSC-2) that was discharged from a previous vehicle. Add tap water or distilled water as needed to reach at least half full.



#### **NOTICE**

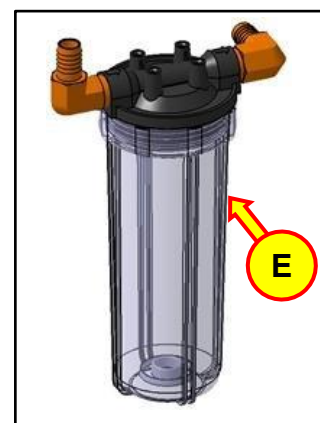
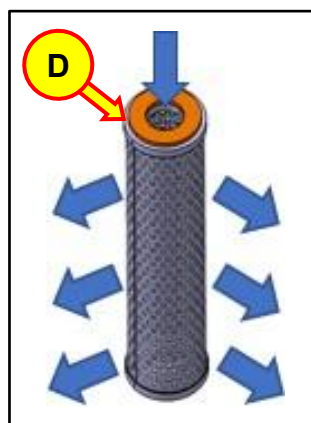
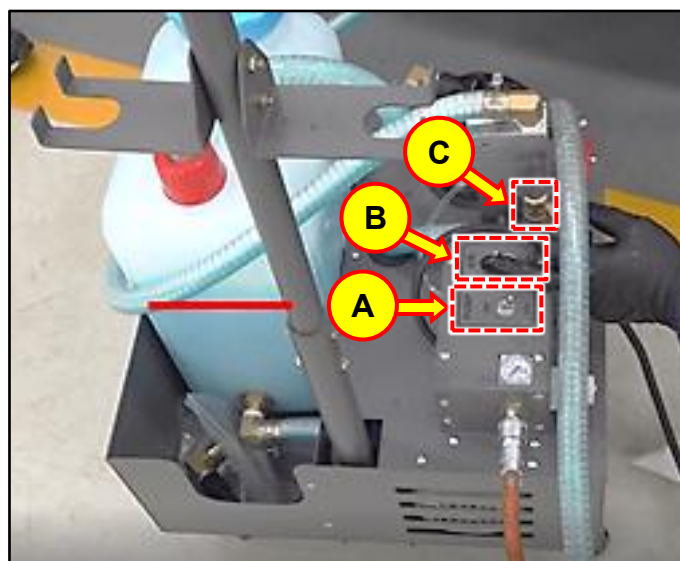
The coolant circulation container must be at least half full to allow for proper priming of the pump system.

Do **NOT** use salt water in the coolant circulation container.

Coolant Flushing Equipment Maintenance

To ensure proper maintenance of the equipment, follow the steps below after completing a cleaning operation on each vehicle.

1. Turn **ON** the water pump (A) first, and then turn **ON** the air (B).
2. Check the equipment's **Blue Inlet Hose** end to see if air is coming out. This can be done by placing your hand over the end and feeling for airflow.
3. If air is **NOT** coming out, use the air pressure regulator (C) to increase the pressure slightly until air comes out.
4. Set the pressure to **2 bar (29 psi)**.
5. Clean the filter (D) and filter case (E) with an air gun to remove foreign substances.

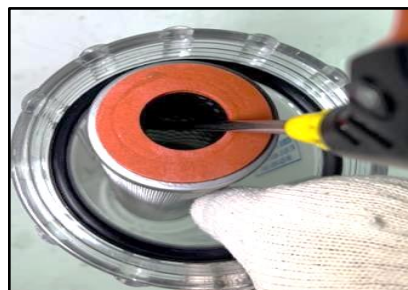


**NOTICE**

Spray the air gun into the gaps of the filter's inner wall, where sludge can get lodged. Rotate the filter to ensure even spraying and to remove as much buildup as possible.

**NOTICE**

A clogged filter may have decreased flow rate and reduced cleaning efficiency.



**Debris Discharge and Cooling System Cleaning – IONIQ Electric (AE EV)**

**i Information**

Before proceeding with the service procedure, open the hood and visually inspect coolant color. If coolant color is pink or green (general coolant), then this TSB does **NOT** apply.

Preparation

1. Place vehicle in **Ready** mode, and bring the the Electric Water Pump (EWP) to above **2,000 rpm**.

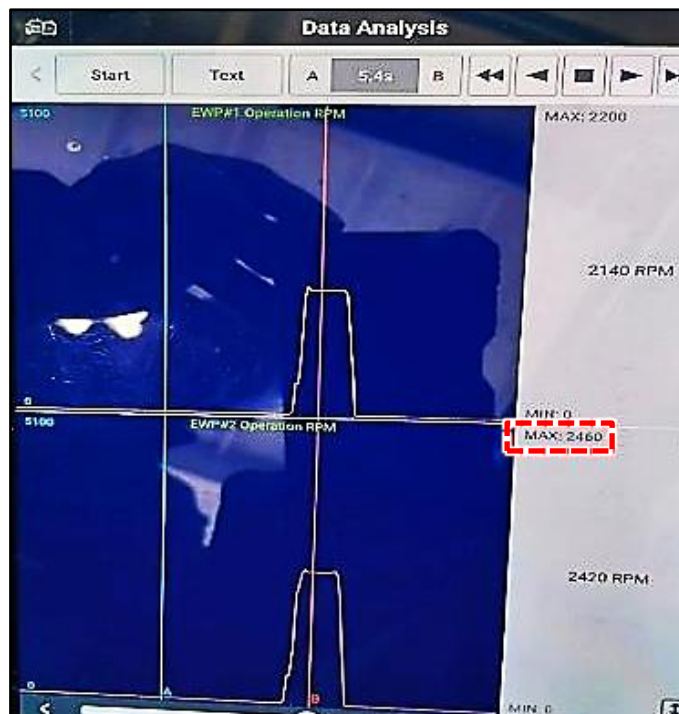
**i Information**

When EWP is above **2,450 rpm**, a warning message may appear on the cluster, such as **Coolant Supplement** or **Inverter Coolant**.

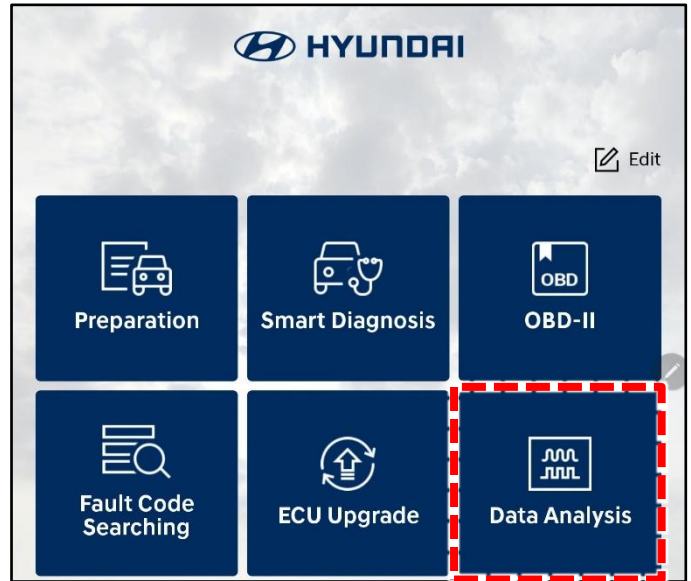
**i Information**

At right is an example of the **Data Analysis** graph for the vehicle's 2 EWPs at start-up in **Ready** mode.

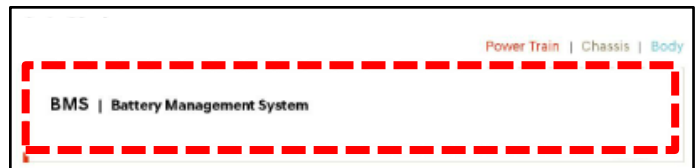
One EWP briefly increased above **2,450 rpm** as seen by the reading **MAX: 2460**.



- 2. Connect a VCI and launch GDS-Smart. Then select **Data Analysis**.



- 3. Select **BMS / Battery Management System**.



- 4. Scroll down to verify that the **Battery BTMS Valve Control Mode** is set to **Combined Mode**.  
If the value shows **Separated Mode**, turn ignition **ON** and **OFF**. Then change the value to **Combined Mode**.

**i Information**

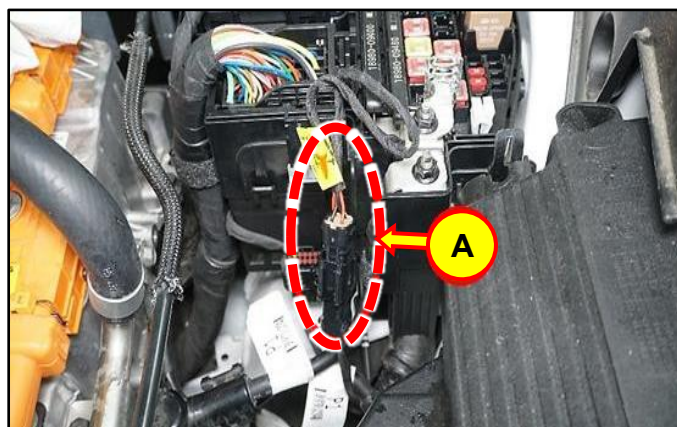
**Combined Mode** is necessary to perform adequate cleaning as detailed in this TSB.

The screenshot shows the 'Data Analysis' screen with a table of sensor data. The 'Battery BTMS Valve Control Mode' row is highlighted with a red dashed box.

Sensor Name(154)	Value	Unit	Link Up
BMS Battery Chiler Operation RPM Request	0	RPM	
DATC A/C Compressor Operation RPM	0	RPM	
EWP#2 Operation RPM	0	RPM	
<b>Battery BTMS Valve Control Mode</b>	<b>Combined Mode</b>	-	
DATC Battery Chiler Valve Operation Status	Active	-	
BMS WHRLoop Inhibit Status	Permission	-	
BMS Heater Relay Status	OFF	-	
EWP#1 Fault Status	Normal	-	

Coolant Draining Procedure

1. Remove the underhood service interlock connector (A).



**i Information**

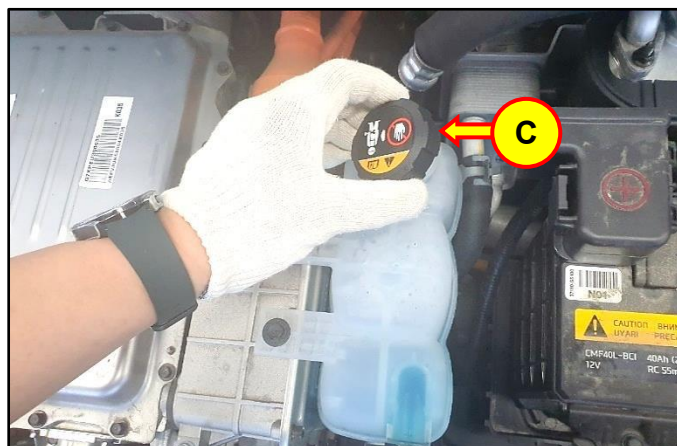
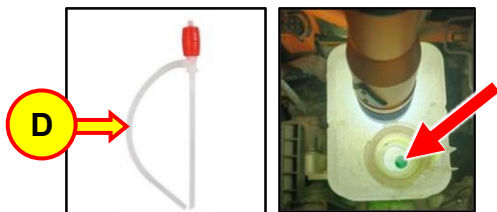
If the vehicle does **NOT** have an underhood service interlock connector, the safety switch (B) above the battery must be removed. This switch can be accessed under the carpet in the trunk of the vehicle.



2. Remove the reservoir tank cap (C), and insert a siphon pump hose (D) into the lower chamber.

**i Information**

The reservoir tank has 2 chambers, upper and lower. Carefully feel for the hole between the two to insert the hose all the way down into the lower chamber.



Coolant Discharge & Air Draining Procedure

1. Ensure the coolant flushing equipment hoses are securely connected to the vehicle at the locations noted below.

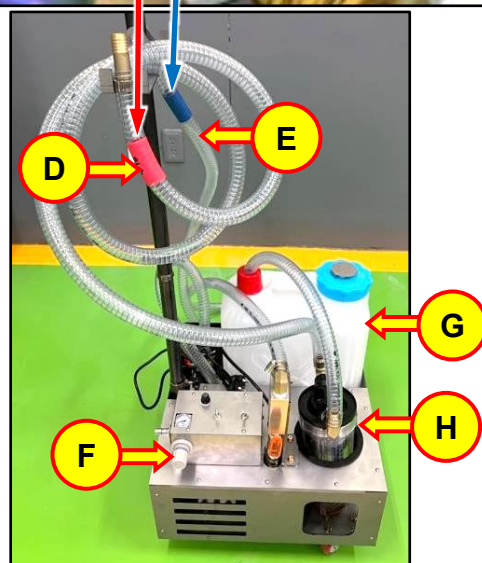
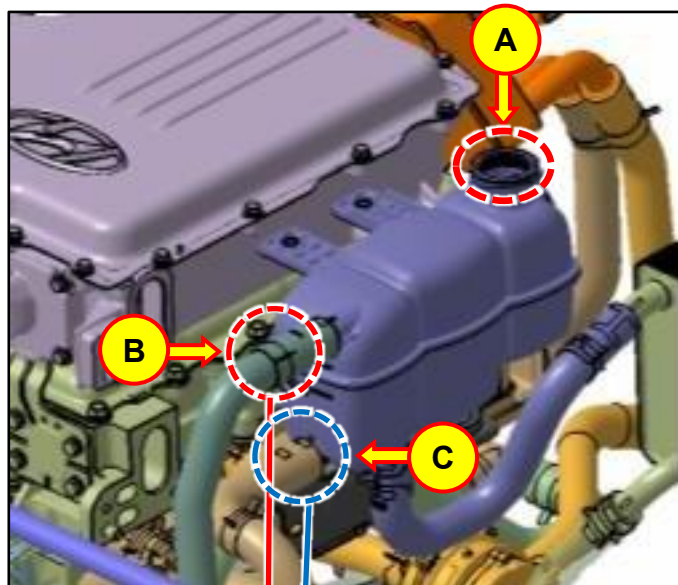
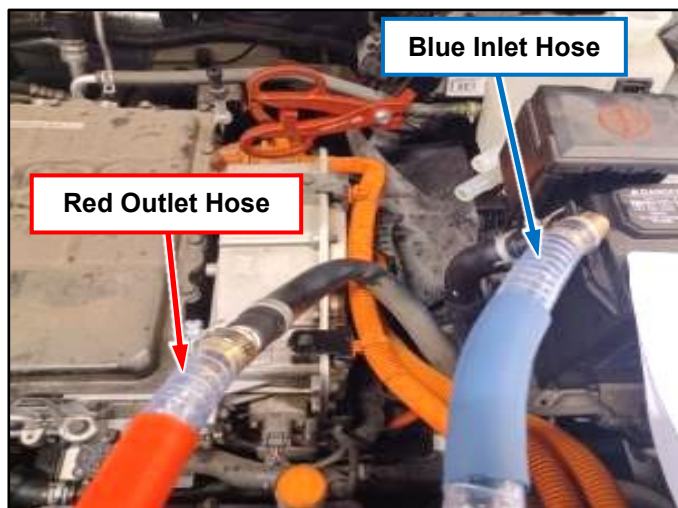
Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Coolant tank inlet hose
<b>Red Outlet Hose</b>	Coolant tank outlet hose

2. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**
3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**

Refer to the diagrams on the right for the components below:

- Reservoir tank cap (A)
- Coolant tank outlet (hose) (B)
- Coolant tank inlet (hose) (C)
- Red outlet hose (D)
- Blue inlet hose (E)
- Coolant pump & air pressurizer (F)
- Coolant circulation container (G)
- Filter (H)

5. Disconnect the inlet and outlet hoses of the cleaning equipment from the vehicle.
6. Set aside the separated reservoir tank for cleaning at a later time.



Motor System Cooling Circuit Cleaning

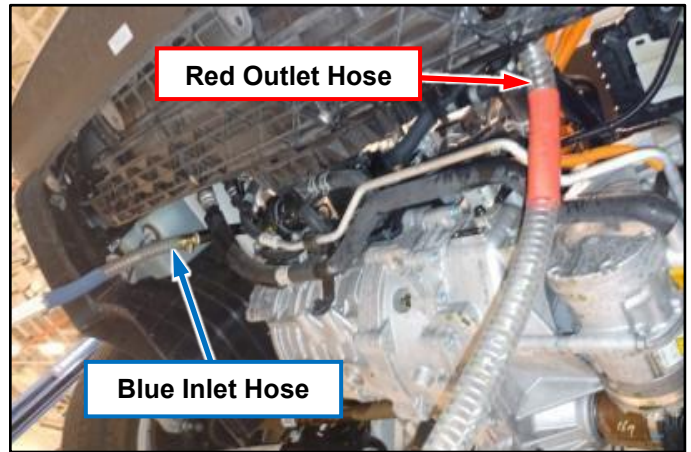
**i Information**

The Motor system cooling circuit includes Electric Water Pump (EWP), Electric Power Control Unit (EPCU), motor, radiator, and On-Board Charger (OBC).

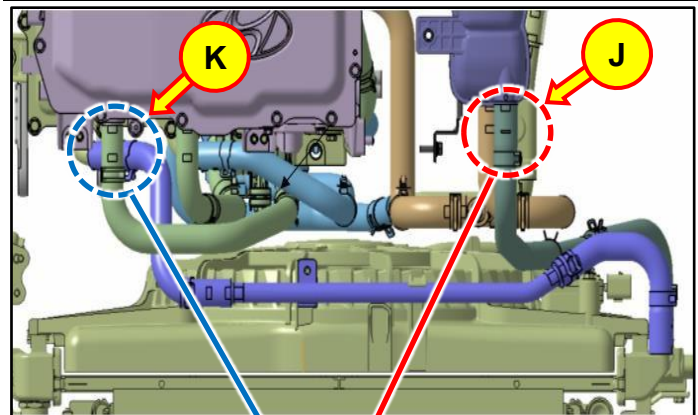
This cooling circuit requires thorough cleaning in **BOTH** directions. Follow all steps below.

1. Lift the vehicle.
2. Connect the hoses securely to the vehicle as follows:

Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	EPCU inlet nipple
<b>Red Outlet Hose</b>	Radiator outlet hose

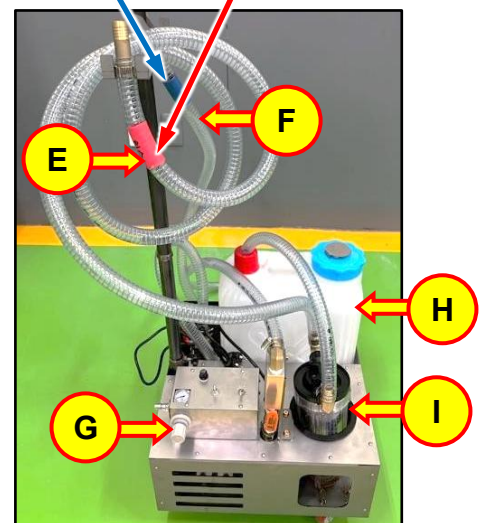


3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**



Refer to the diagrams on the right for the components below:

- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)
- Radiator outlet (hose) (J)
- EPCU inlet (nipple) (K)



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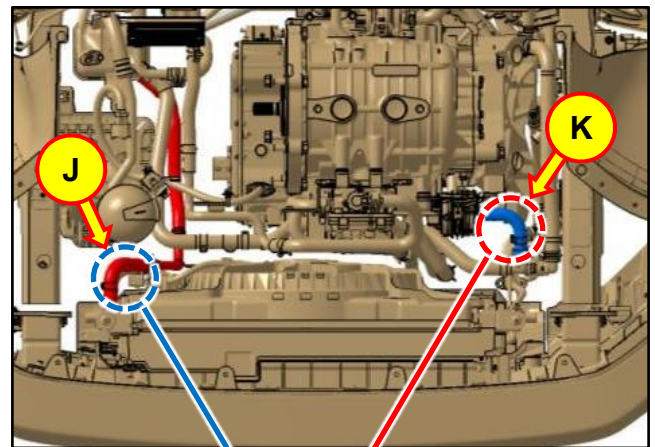
5. While the cleaning equipment is in operation, remove the reservoir tank (L).
6. Clean the residual coolant and debris inside the reservoir by injecting water and blowing air through the tank.



7. Swap the coolant flushing equipment hoses in the opposite direction from previous **steps 2 - 4**.

Securely connect the hoses to the vehicle as follows:

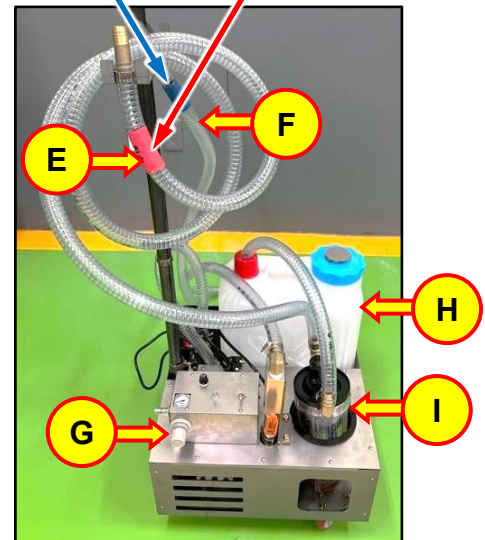
Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Radiator outlet hose
<b>Red Outlet Hose</b>	EPCU inlet nipple



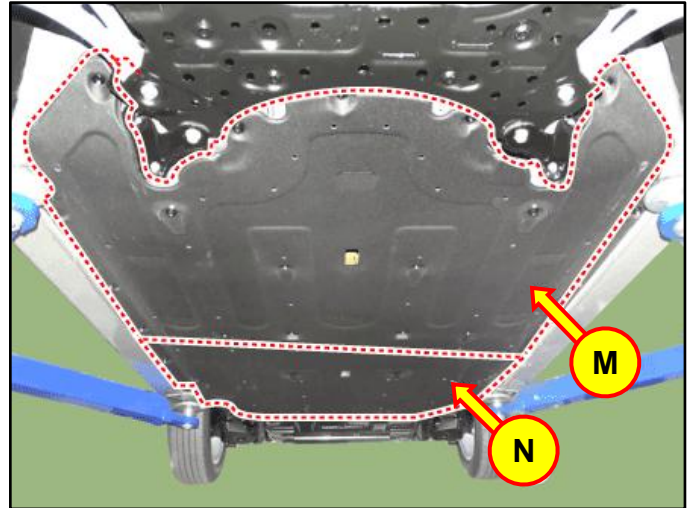
8. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
9. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**

Refer to the diagrams on the right for the components below:

- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)
- Radiator outlet (hose) (J)
- EPCU inlet (nipple) (K)



10. Swap back the coolant flushing equipment hoses and perform cleaning and air draining again (as in **steps 2 - 4** above).
11. Remove the coolant flushing equipment hoses and reinstall the original hoses of the vehicle in their original locations.
12. While the vehicle is lifted, remove the high voltage battery front under cover (M) and rear (N) under cover by referring to the shop manual:
  - **Battery Control System > High Voltage Battery System > Repair Procedures**



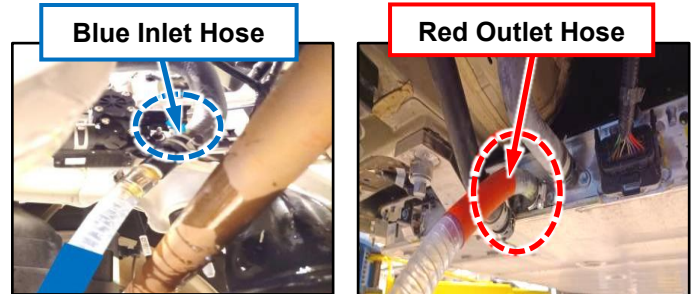
HV Battery Cooling Circuit Cleaning

**i Information**

The HV battery cooling circuit includes HV battery, battery chiller, and coolant heater.

1. Lift the vehicle.
2. Connect the hoses securely to the vehicle as follows:

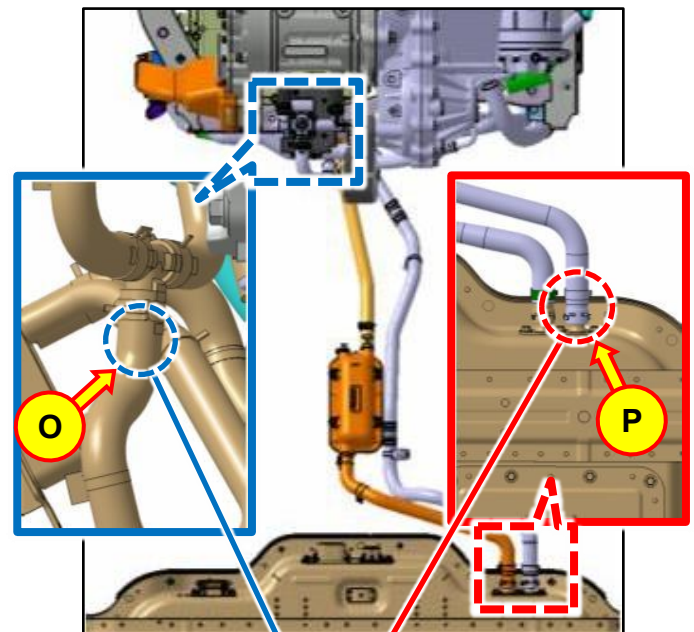
Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Battery chiller outlet hose
<b>Red Outlet Hose</b>	Battery inlet nipple



3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**

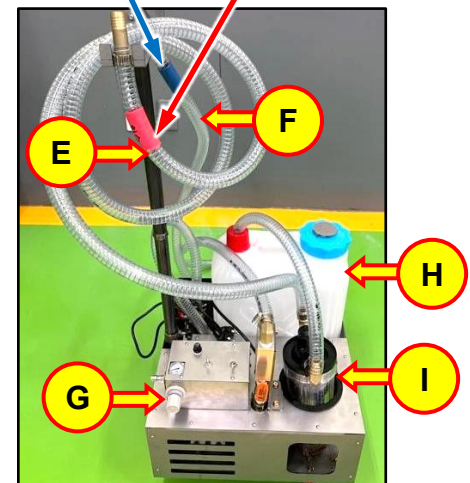
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**
 Refer to the diagrams on the right for the components below:

- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)
- Battery chiller outlet (hose) (O)
- Battery inlet (nipple) (P)



5. Remove the coolant flushing equipment hoses and reinstall the original hoses of the vehicle in their original locations.
6. If vehicle is equipped with a heat pump, proceed to the [Waste Heat Chiller Cooling Circuit Cleaning](#) procedure.

If vehicle is **NOT** equipped with a heat pump, proceed to the [Coolant Change](#) procedure.



Waste Heat Chiller Cooling Circuit Cleaning

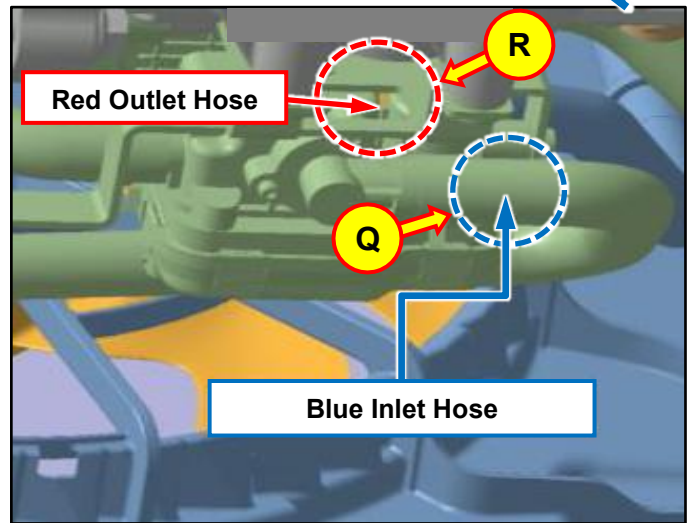
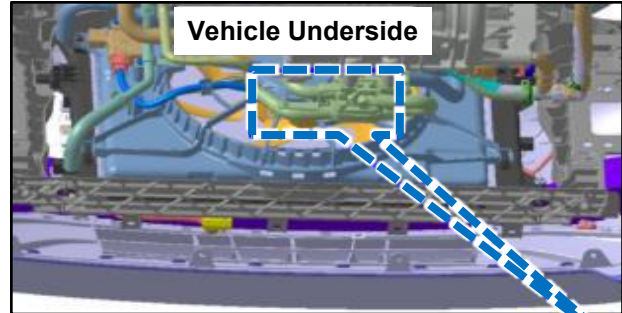
**i Information**

This procedure **ONLY** applies to vehicles with heat pump.

1. While vehicle is lifted, remove the waste heat chiller inlet hose (Q) from underneath the vehicle and allow it to drain.
- 2.

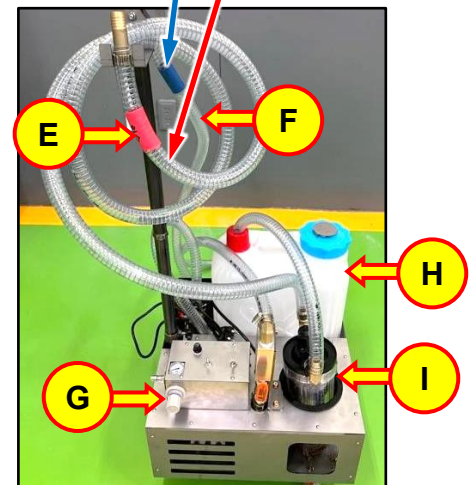
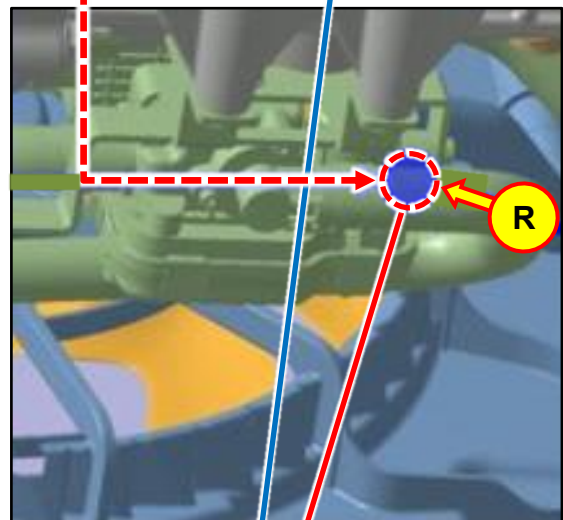
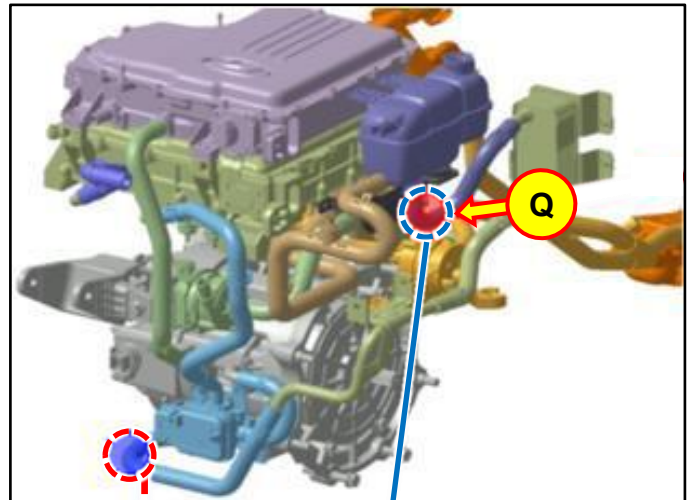
Connect the hoses securely to the vehicle as follows:

Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Waste heat chiller inlet hose (Q)
<b>Red Outlet Hose</b>	Waste heat chiller outlet hose (R)



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3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**Refer to the diagrams on the right for the components below:
  - Red outlet hose (E)
  - Blue inlet hose (F)
  - Coolant pump & air pressurizer (G)
  - Coolant circulation container (H)
  - Filter (I)
  - Waste heat chiller inlet hose (Q)
  - Waste heat chiller outlet hose (R)
5. Remove the coolant flushing equipment hoses and reinstall the original hoses of the vehicle in their original locations.
6. Proceed to the [Coolant Change](#) procedure.



**Debris Discharge and Cooling System Cleaning – Kona Electric (OS EV)**

**i Information**

Before proceeding with the service procedure, open the hood and visually inspect coolant color. If coolant color is pink or green (general coolant), then this TSB does **NOT** apply.

Preparation

1. Place vehicle in **Ready** mode, and bring the the Electric Water Pump (EWP) to above **2,000 rpm**.

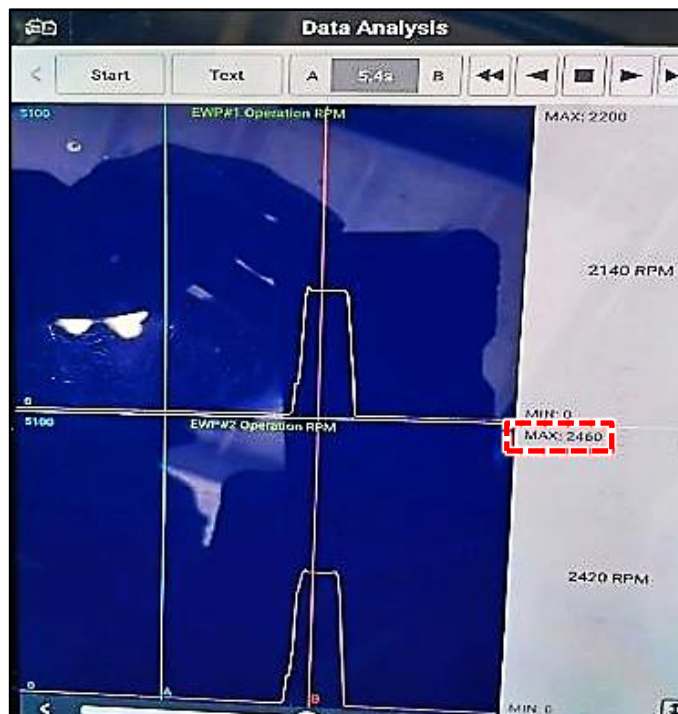
**i Information**

When EWP is above **2,450 rpm**, a warning message may appear on the cluster, such as **Coolant Supplement** or **Inverter Coolant**.

**i Information**

At right is an example of the **Data Analysis** graph for the vehicle's 2 EWPs at start-up in **Ready** mode.

One EWP briefly increased above **2,450 rpm** as seen by the reading **MAX: 2460**.



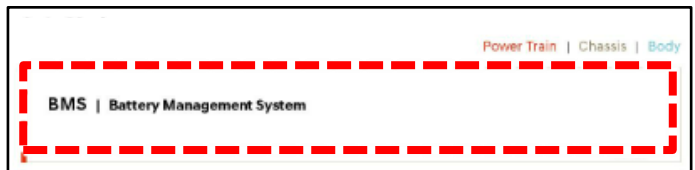
**SUBJECT:**

**COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
(SERVICE CAMPAIGN T9E)**

- 2. Connect a VCI and launch GDS-Smart. Then select **Data Analysis**.



- 3. Select **BMS / Battery Management System**.



- 4. Scroll down to verify that the **Battery BTMS Valve Control Mode** is set to **Combined Mode**.  
If the value shows **Separated Mode**, turn ignition **ON** and **OFF**. Then change the value to **Combined Mode**.

**i Information**

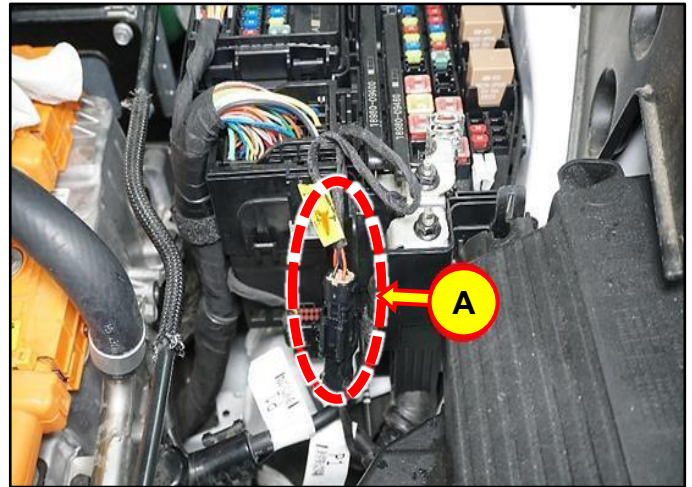
**Combined Mode** is necessary to perform adequate cleaning as detailed in this TSB.

The screenshot shows the Data Analysis screen with a table of sensor data. The 'Battery BTMS Valve Control Mode' is highlighted with a red dashed box.

Sensor Name(154)	Value	Unit	Link Up
BMS Battery Chiller Operation RPM Request	0	RPM	
DATC A/C Compressor Operation RPM	0	RPM	
EWP#2 Operation RPM	0	RPM	
Battery BTMS Valve Control Mode	Combined Mode	-	
DATC Battery Chiller Valve Operation Status	Active	-	
BMS WHRLoop Inhibit Status	Permission	-	
BMS Heater Relay Status	OFF	-	
EWP#1 Fault Status	Normal	-	

Coolant Draining Procedure

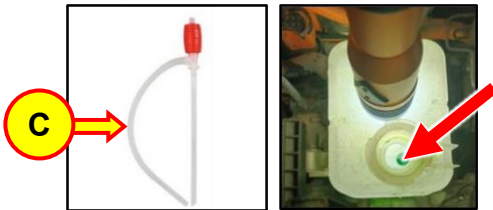
1. Remove the underhood service interlock connector (A).



2. Remove the reservoir tank cap (B), and insert a siphon pump hose (C) into the lower chamber.

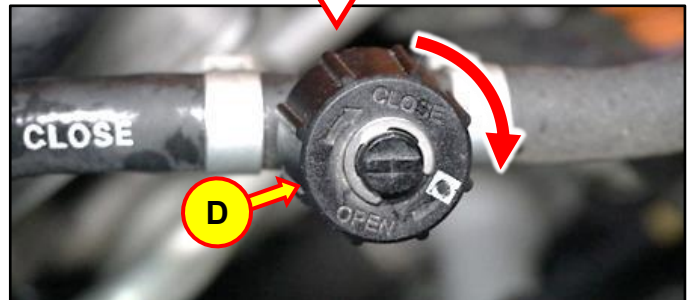
**i** Information

The reservoir tank has 2 chambers, upper and lower. Carefully feel for the hole between the two to insert the hose all the way down into the lower chamber.



3. Ensure that the air bleeding valve (D) is **closed** on the radiator to reservoir hose.

If there is **NO** valve, block the flow of the hose by applying a clamp or zip tie (E).



4. Drain the coolant from the tank using the siphon pump hose.



Coolant Discharge & Air Draining Procedure

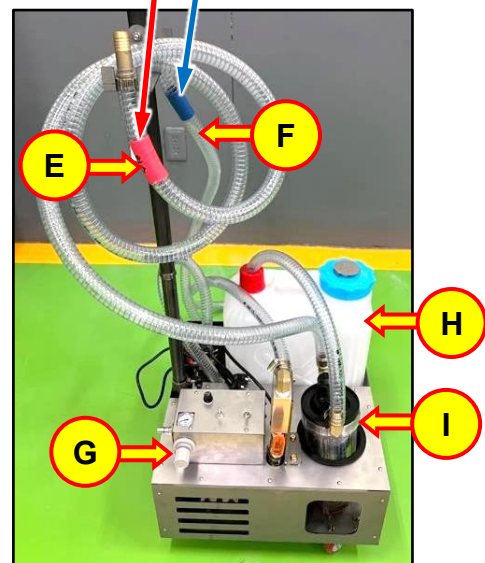
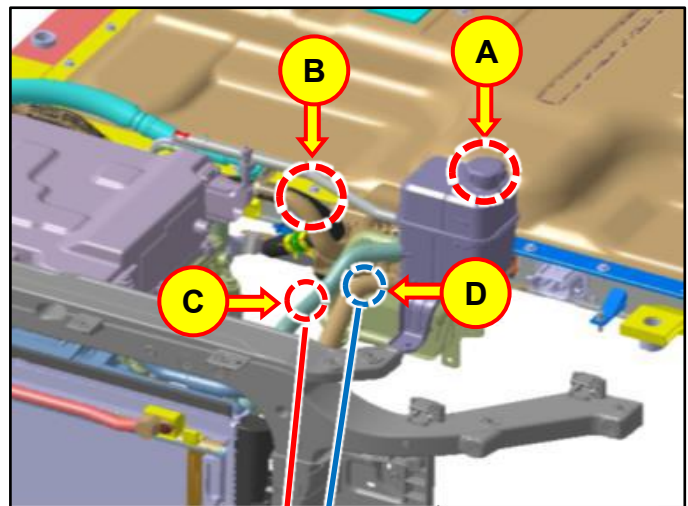
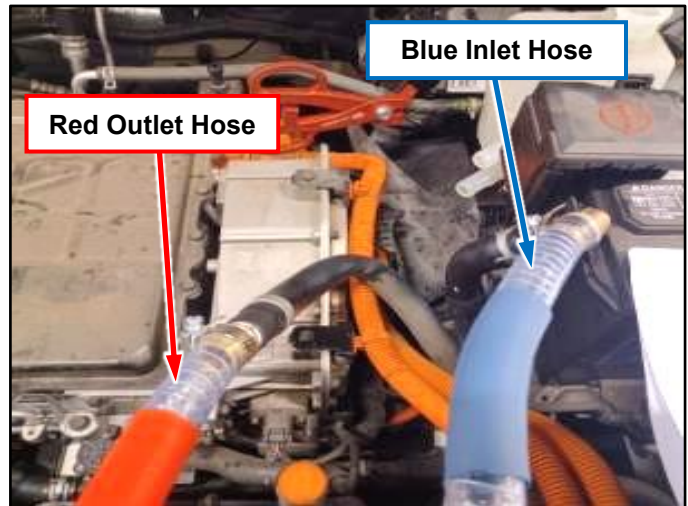
1. Ensure the coolant flushing equipment hoses are securely connected to the vehicle at the locations noted below.

Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Coolant tank inlet hose
<b>Red Outlet Hose</b>	Coolant tank outlet hose

2. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**
3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**

Refer to the diagrams on the right for the components below:

- Reservoir tank cap (A)
- Reservoir tank air bleeding valve (B)
- Coolant tank outlet (hose) (C)
- Coolant tank inlet (hose) (D)
- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)



**SUBJECT:** COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
(SERVICE CAMPAIGN T9E)

5. Disconnect the inlet and outlet hoses of the cleaning equipment from the vehicle.
6. Set aside the separated reservoir tank for cleaning at a later time.



Motor System Cooling Circuit Cleaning

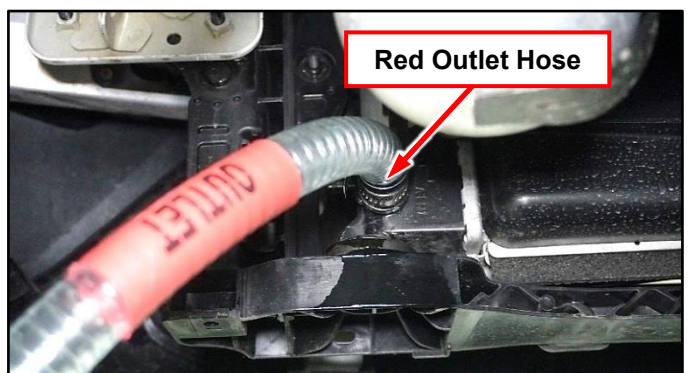
**i** Information

The Motor system cooling circuit includes Electric Water Pump (EWP), Electric Power Control Unit (EPCU), motor, radiator, and On-Board Charger (OBC).

This cooling circuit requires thorough cleaning in **BOTH** directions. Follow all steps below.

1. Lift the vehicle.
2. Connect the hoses securely to the vehicle as follows:

Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	EWP inlet hose
<b>Red Outlet Hose</b>	Radiator outlet nipple

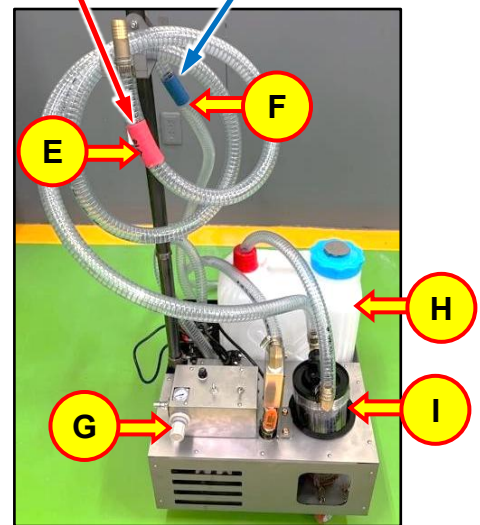
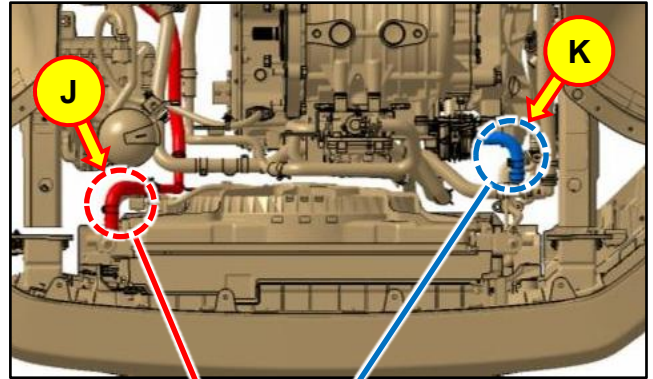
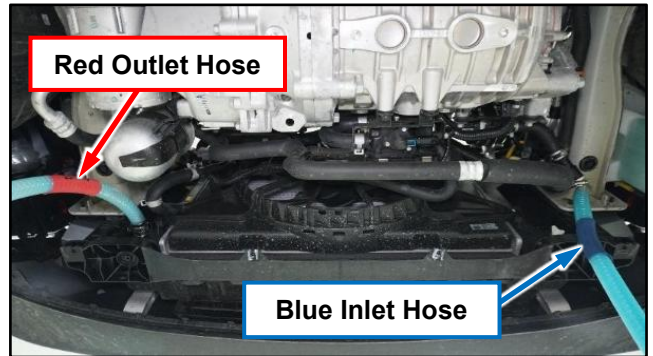


**SUBJECT:** COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
(SERVICE CAMPAIGN T9E)

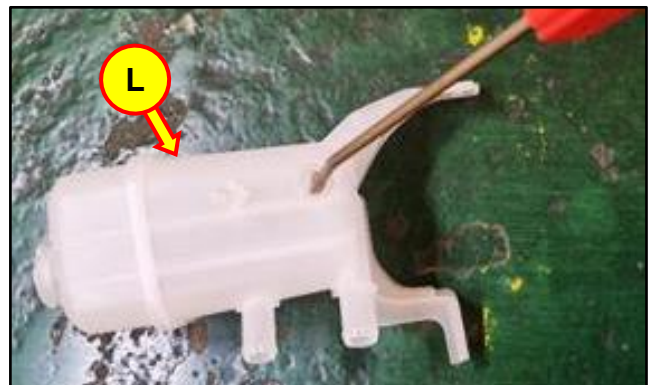
3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**

Refer to the diagrams on the right for the components below:

- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)
- Radiator outlet (nipple) (J)
- EWP inlet (hose) (K)



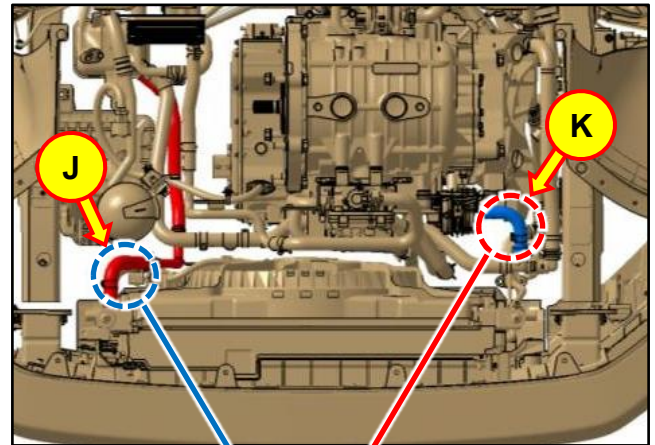
5. While the cleaning equipment is in operation, remove the reservoir tank (L).
6. Clean the residual coolant and debris inside the reservoir by injecting water and blowing air through the tank.



- Swap the coolant flushing equipment hoses in the opposite direction from previous **steps 2 - 4**.

Securely connect the hoses to the vehicle as follows:

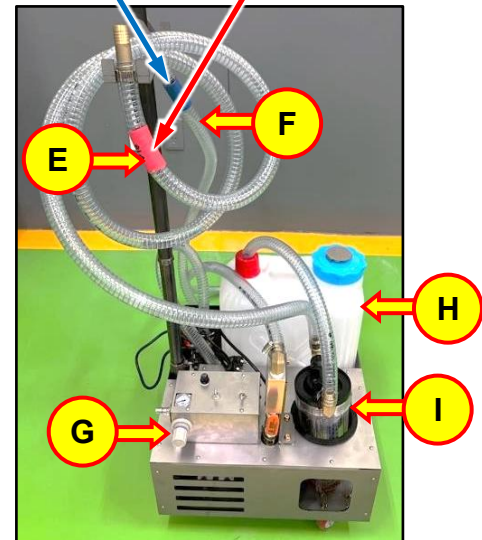
Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Radiator outlet nipple
<b>Red Outlet Hose</b>	EWP inlet hose



- Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
- Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**

Refer to the diagrams on the right for the components below:

- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)
- Radiator outlet (nipple) (J)
- EWP inlet (hose) (K)



- Swap back the coolant flushing equipment hoses and perform cleaning and air draining again (as in **steps 2 - 4** above).
- Remove the coolant flushing equipment hoses and reinstall the original hoses of the vehicle in their original locations.

12. Determine the next procedure based on the vehicle's cooling circuit valve type:

Circuit Type	Vehicle Production Date	Go to:
Valve	Before 4/8/2020	<a href="#">HV Battery Cooling Circuit Section Cleaning – Valve Type</a>
T-Branch Pipe	From 4/8/2020 and later	<a href="#">HV Battery Cooling Circuit Section Cleaning – T-Branch Pipe Type</a>

HV Battery Cooling Circuit Cleaning – Valve Type

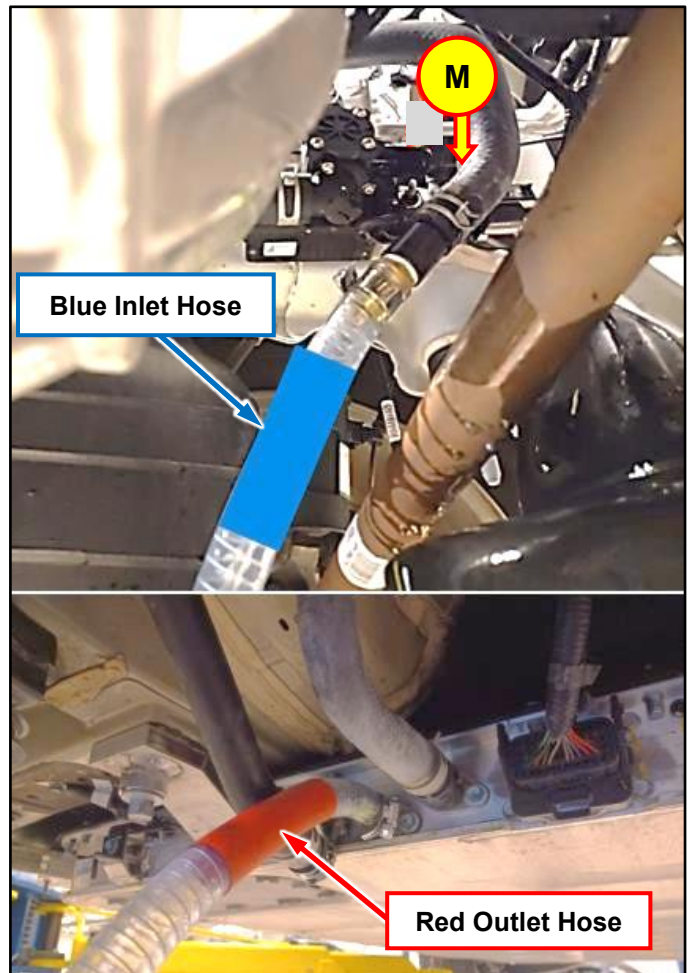
**i Information**

The HV battery cooling circuit includes HV battery, battery chiller, and coolant heater.

- Lift the vehicle.
- Connect the hoses securely to the vehicle as follows:

Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Battery chiller outlet hose (M)
<b>Red Outlet Hose</b>	Battery inlet nipple

- Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
- Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**



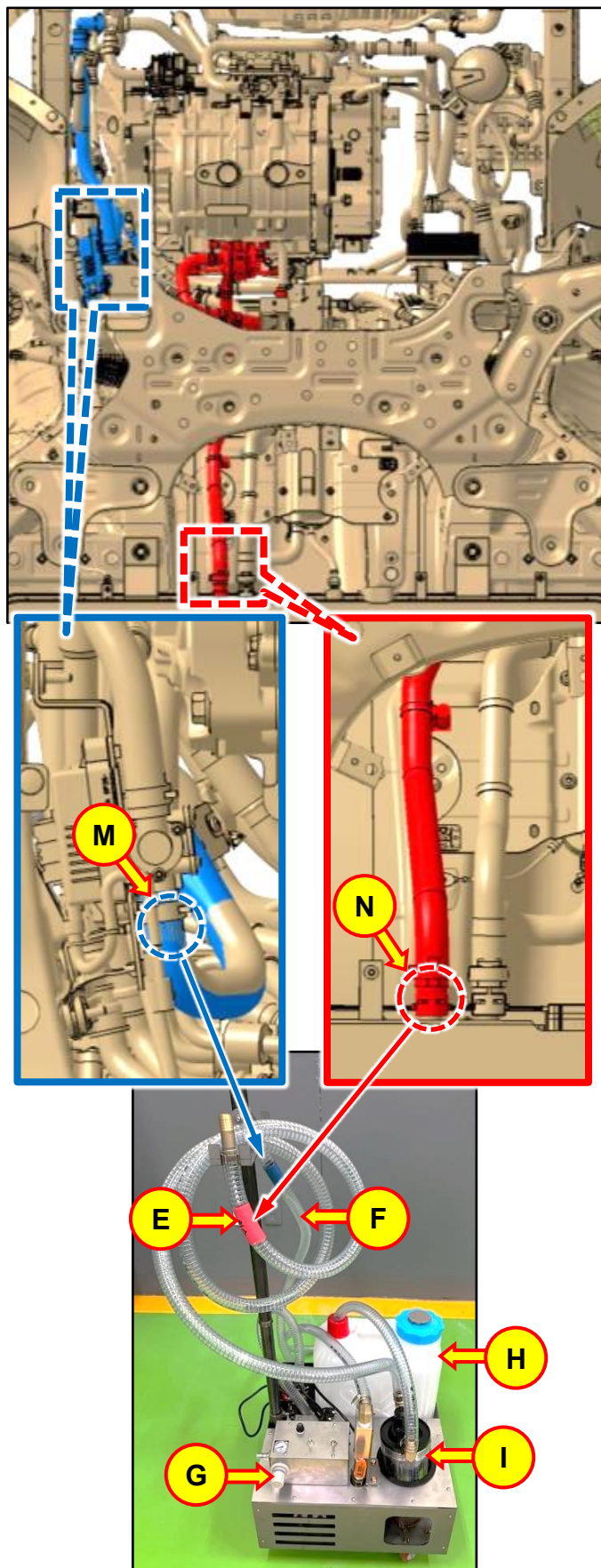
**SUBJECT:**

**COOLING SYSTEM CIRCUIT DEBRIS DISCHARGE & COOLANT CHANGE  
(SERVICE CAMPAIGN T9E)**

Refer to the diagrams on the right for the components below:

- Red outlet hose (E)
- Blue inlet hose (F)
- Coolant pump & air pressurizer (G)
- Coolant circulation container (H)
- Filter (I)
- Battery chiller outlet (hose) (M)
- Battery inlet (nipple) (N)

5. Proceed to the [Coolant Change](#) procedure.



HV Battery Cooling Circuit Cleaning – T-Branch Pipe Type

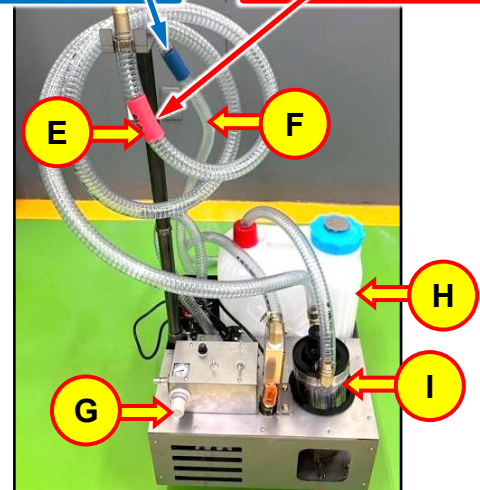
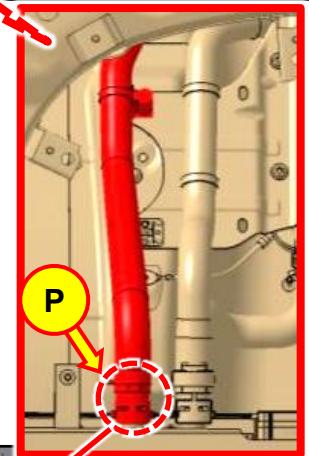
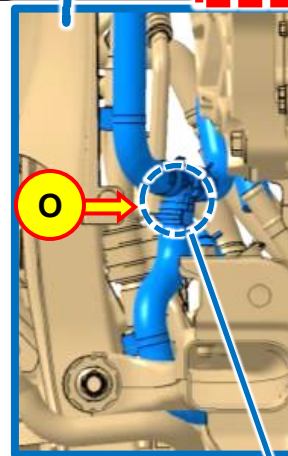
**i Information**

The HV battery cooling circuit includes HV battery, battery chiller, and coolant heater.

1. Lift the vehicle.
2. Connect the hoses securely to the vehicle as follows:

Equipment	Vehicle Connection Point
<b>Blue Inlet Hose</b>	Battery chiller outlet hose
<b>Red Outlet Hose</b>	Battery inlet nipple

3. Perform flush and filter cleaning, circulating coolant for **5 minutes**.
  - Air **ON**, Pump **ON**, Inlet Valve **ON**
4. Perform air draining for **2 minutes** to discharge and drain the coolant.
  - Air **ON**, Pump **OFF**, Inlet Valve **OFF**
 Refer to the diagrams on the right for the components below:
  - Red outlet hose (E)
  - Blue inlet hose (F)
  - Coolant pump & air pressurizer (G)
  - Coolant circulation container (H)
  - Filter (I)
  - Battery chiller outlet (hose) (O)
  - Battery inlet (nipple) (P)
5. Proceed to the [Coolant Change](#) procedure.

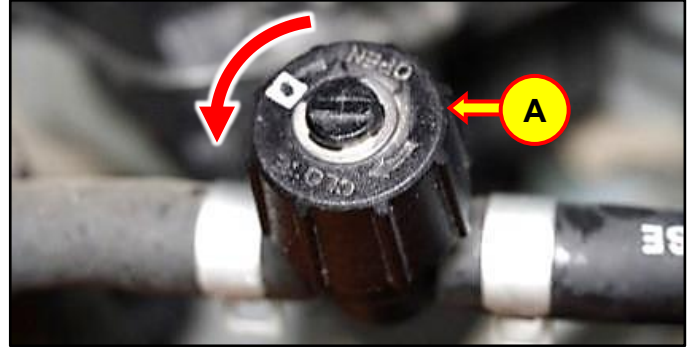


## Coolant Change

1. Remove the coolant flushing equipment hoses and reinstall the original hoses of the vehicle in their original locations.
2. Reconnect the service interlock connector or service safety switch that was previously disconnected from the battery.
3. Reinstall the reservoir tank.
4. **Kona Electric (OS EV):**  
Before filling with coolant, restore the flow path of the radiator to reservoir hose by ensuring the valve is in the **OPEN** position (A).

### **i** Information

If the hose does **NOT** have a valve, restore the flow path by removing any clamp that was previously applied before draining the coolant.



5. Fill with new Electric Vehicle Battery System Coolant (BSC-2).

### NOTICE

Fill the reservoir tank with the shop manual specifications listed for each model, approximately **3 gal (10-13L)**.

6. Use the GDS to perform air bleeding for **30 minutes** by circulating the coolant through the EWP.

Refer to the shop manual:

- **Cooling System > Electric & High Voltage Battery Cooling System > Coolant > Repair procedures**

7. **Kona Electric (OS EV):**  
After coolant fill and bleeding is completed, close the valve on the radiator to reservoir hose.

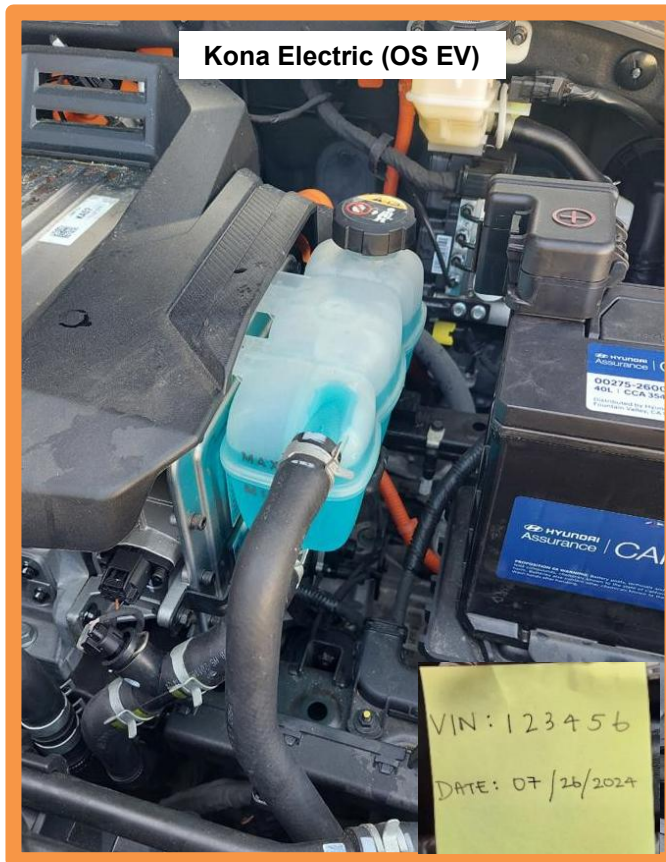
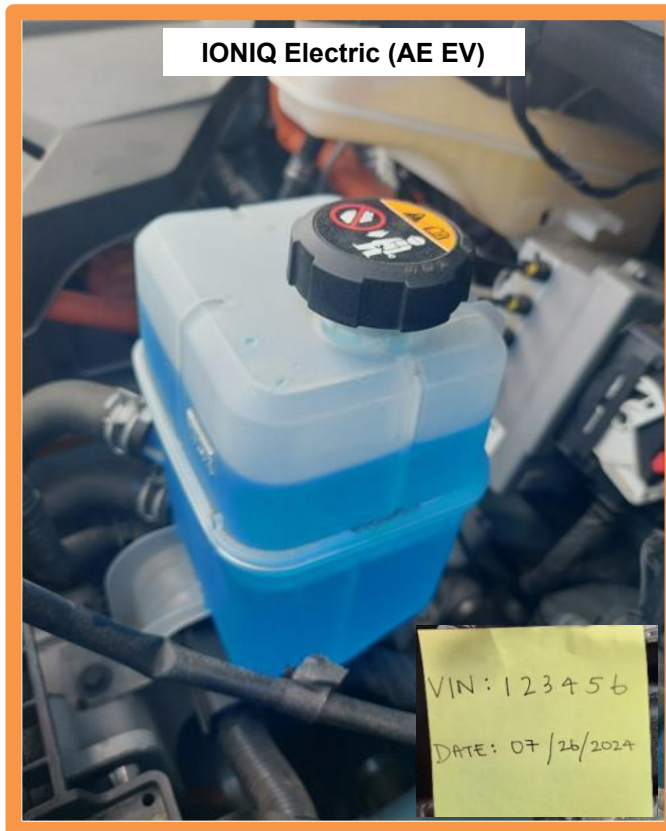
8.

**DIGITAL  
DOCUMENTATION**



Using STUI, take a photo of the coolant reservoir tank filled with coolant after the cleaning and flushing procedure was completed, with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



9. Start the engine and verify that the message **Coolant Supplement** or an **Inverter Coolant** warning does **NOT** display.
  - If either message displays, repeat the **Debris Discharge and Cooling System Cleaning** procedure.
  - If the message still displays after repeating the procedure, contact Techline for additional assistance (refer to TSB **25-GI-006H, Instructions for Contacting Techline**).
  
10. Clean the coolant flushing equipment thoroughly following the instructions in the [Coolant Flushing Equipment Maintenance](#) procedure on page 8.