Technical Service Bulletin	GROUP HVAC	NUMBER 25-HA-002G
	DATE JULY 2025	MODEL(S) SEE BELOW

SUBJECT: EVAPORATOR CORE LEAK INSPECTION AND REPLACEMENT

Description: Certain Genesis vehicles may experience insufficient cooling in the cabin due to leakage at the evaporator core. This bulletin provides instructions to inspect the A/C system for leaks and replace the evaporator core, if necessary.

Applicable Vehicles:

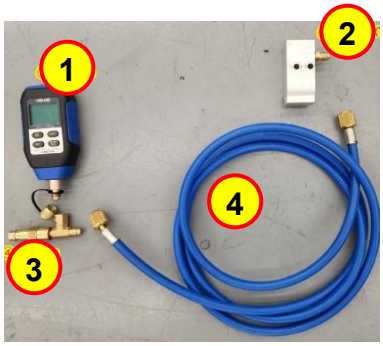
- 2020–2025MY G70 (IK) with 2.0T, 2.5T, and 3.3T engines produced from 01/06/2020–10/01/2024
- 2021–2024MY G80 (RG3) with 2.5T and 3.5T engines produced from 07/25/2020–04/01/2024
- 2022–2023 & 2025MY GV70 (JK1) with 2.5T and 3.5T engines produced from 03/10/2021–04/01/2024 (VINs beginning with 'KMU')
- 2024–2025MY GV70 (JK1A) with 2.5T and 3.5T engines produced from 05/10/2023 – 11/08/2024 (VINs beginning with '5NM')
- 2021–2025MY GV80 (JX1) with 2.5T and 3.5T engines produced from 03/06/2021 – 04/01/2024

Model	Part Name	Part Number	Figure	QTY	Remarks
G70 (IK)	Evaporator Core	97139-J5000QQH		1	Replace only when Evaporator Core replacement is required.
G80 (RG3)		97139-T1001QQH			
GV70 (JK1, JK1A)		97139-AR000QQH			
GV80 (JX1)		97139-T6000QQH			
ALL	O-Ring (Evaporator Core Line)	97141-4H900QQH		2	Replace after SST test is complete, and Evaporator Core is **OK**. If the Evaporator Core replacement is needed, do **NOT** replace this O-Ring. Evaporator Core comes with new O-rings.

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

ALL	O-Ring (Suction Line)	97690-34340QQH		1	Replace when Thermostatic Expansion Valve (TXV) is removed. These O-Rings must be replaced regardless of Evaporator Core condition
ALL	O-Ring (Liquid Line)	97690-34310QQH		1	
ALL	Front Pillar Trim Clip	85815-C1100		RH: 1 LH: 1	
ALL	Steering Wheel Lock Bolt	56115-B1000		1	Replace only when Evaporator Core replacement is necessary
G70 (IK)	Front Pillar Trim Fastener	85849-G9000		RH: 1 LH: 1	
G80 (RG3), GV80 (JX1)		82315-2W000			
GV70 (JK1, JK1A)		82315-2P000			
G70 (IK), G80 (RG3), GV70 (JK1, JK1A), GV80 (JX1 (4/5P))	Coolant (Pink)	00232-19098		2 Gallons*	Replace only when Evaporator Core replacement is necessary *Dealers will be reimbursed for **6 quarts** for all vehicles, with an exception of **9 quarts** for the GV80 with 6 or 7 passenger seats
GV80 (JX1 (6/7P))				3 Gallons*	
ALL	Supercool 1234YF PAG 46 Viscosity with UV Dye	Manufacturer Part Number: 27262D		One bottle (**8 oz**) may treat up to **23 vehicles**	Commercially Available PAG oil with dye must be used when recharging the A/C system
ALL	Refrigerant R-1234YF	00232-19068		Tank is **10 lbs**	Reimbursement depends on the vehicle model: • G70: **21 oz** • G80: **26 oz** • GV70: **23 oz** • GV80 (4/5P, 6/7P): **32 oz**

SST Information:

Tool Name	Tool Number	Figure	Ordering Information
Evaporator Core Inspection SST Kit	97139-SST01QQH		1. Gauge 2. SST TXV 3. Fitting 4. Hose The Evaporator Core Inspection SST Kit will be shipped to all Genesis Dealers. If additional tools are needed, they may be ordered via WebDCS through the normal ordering process.
R-1234YF PAG Oil Injector Syringe	ROB18465		Website: https://genesisessentialtools.com/ Email: Genesistools@snapon.com Phone: 1-855-763-6630 Hours: 7 AM – 7 PM CST

NOTE: The Oil Injector Syringe is **NOT** shipped as part of the Evaporator Core Inspection SST Kit.

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
GV70 (JK1, JK1A)	50D139R0	Evaporator Core Leak Inspection with SST, Dye Injection, A/C operation, and Leakage Inspection	1.9 M/H	97139-AR000	B33	ZZ4
GV80 (JX1)	50D139R1	Evaporator Core Leak Inspection with SST, Dye Injection, A/C operation, and Leakage Inspection	1.9 M/H	97139-T6000		
G70 (IK)	50D139R2	Evaporator Core Leak Inspection with SST, Dye Injection, A/C operation, and Leakage Inspection	2.1 M/H	97139-J5000		
G80 (RG3)	50D139R3	Evaporator Core Leak Inspection with SST, Dye Injection, A/C operation, and Leakage Inspection	1.8 M/H	97139-T1001		

GV70 (JK1, JK1A)	50D139R4	Evaporator Core Leak Inspection with SST and Evaporator Core Replacement	5.7 M/H	97139-AR000	B33	ZZ4
GV80 (JX1 4/5P)	50D139R5	Evaporator Core Leak Inspection with SST and Evaporator Core Replacement	5.1 M/H	97139-T6000		
GV80 (JX1 6/7P)	50D139R6	Evaporator Core Leak Inspection with SST and Evaporator Core Replacement	5.1 M/H	97139-T6000		
G70 (IK)	50D139R7	Evaporator Core Leak Inspection with SST and Evaporator Core Replacement	5.0 M/H	97139-J5000		
G80 (RG3)	50D139R8	Evaporator Core Leak Inspection with SST and Evaporator Core Replacement	5.3 M/H	97139-T1001		
GV70 (JK1, JK1A)	50D139R9	Leakage Inspection and Evaporator Core Replacement **(Subsequent Dealer Visit)**	5.2 M/H	97139-AR000		
GV80 (JX1 4/5P)	50D139RA	Leakage Inspection and Evaporator Core Replacement **(Subsequent Dealer Visit)**	4.6 M/H	97139-T6000		
GV80 (JX1 6/7P)	50D139RB	Leakage Inspection and Evaporator Core Replacement **(Subsequent Dealer Visit)**	4.6 M/H	97139-T6000		
G70 (IK)	50D139RD	Leakage Inspection and Evaporator Core Replacement **(Subsequent Dealer Visit)**	4.5 M/H	97139-J5000		
G80 (RG3)	50D139RE	Leakage Inspection and Evaporator Core Replacement **(Subsequent Dealer Visit)**	4.8 M/H	97139-T1001		

NOTE 1: Submit claim on Claim Entry Screen as “Campaign” type.
NOTE 2: This TSB includes repair justification photos. Op times include VIN, Mileage, and repair justification photo(s) as outlined in the Digital Documentation Policy.
NOTE 3: 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.**
NOTE 4: If a part is found in need of replacement while performing this TSB 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 5: Dealers will be reimbursed either 6 or 9 quarts of pink coolant for applicable operation codes where the evaporator core is replaced.
NOTE 6: All op codes will reimburse for the max amount of ounces of refrigerant for the applicable model under part number 00232-19068WAR.
NOTE 7: All op codes will reimburse $1.00 in sublet for use of PAG 46 Oil with UV Dye.

Service Procedure:

DIGITAL DOCUMENTATION

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

NOTICE

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

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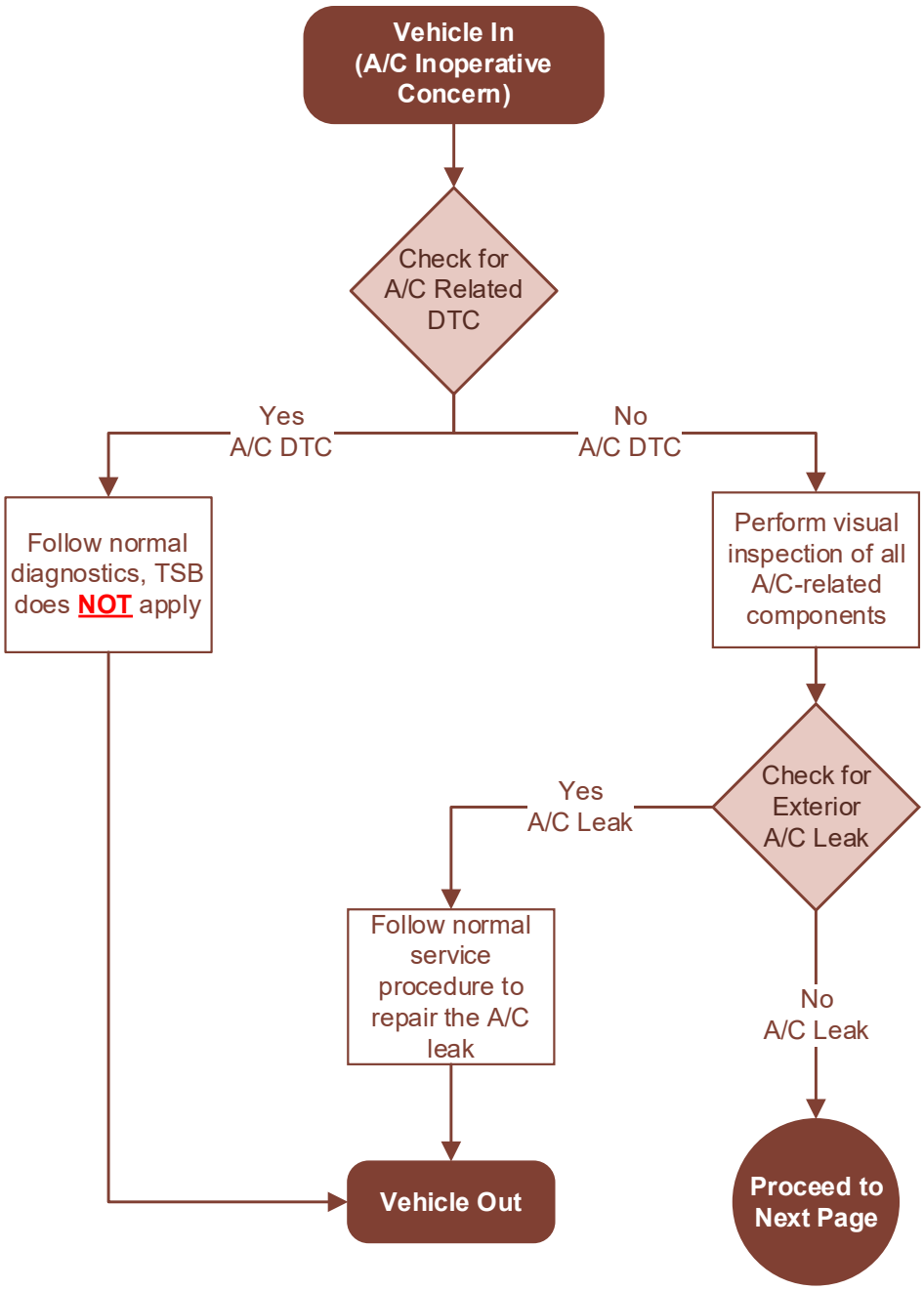
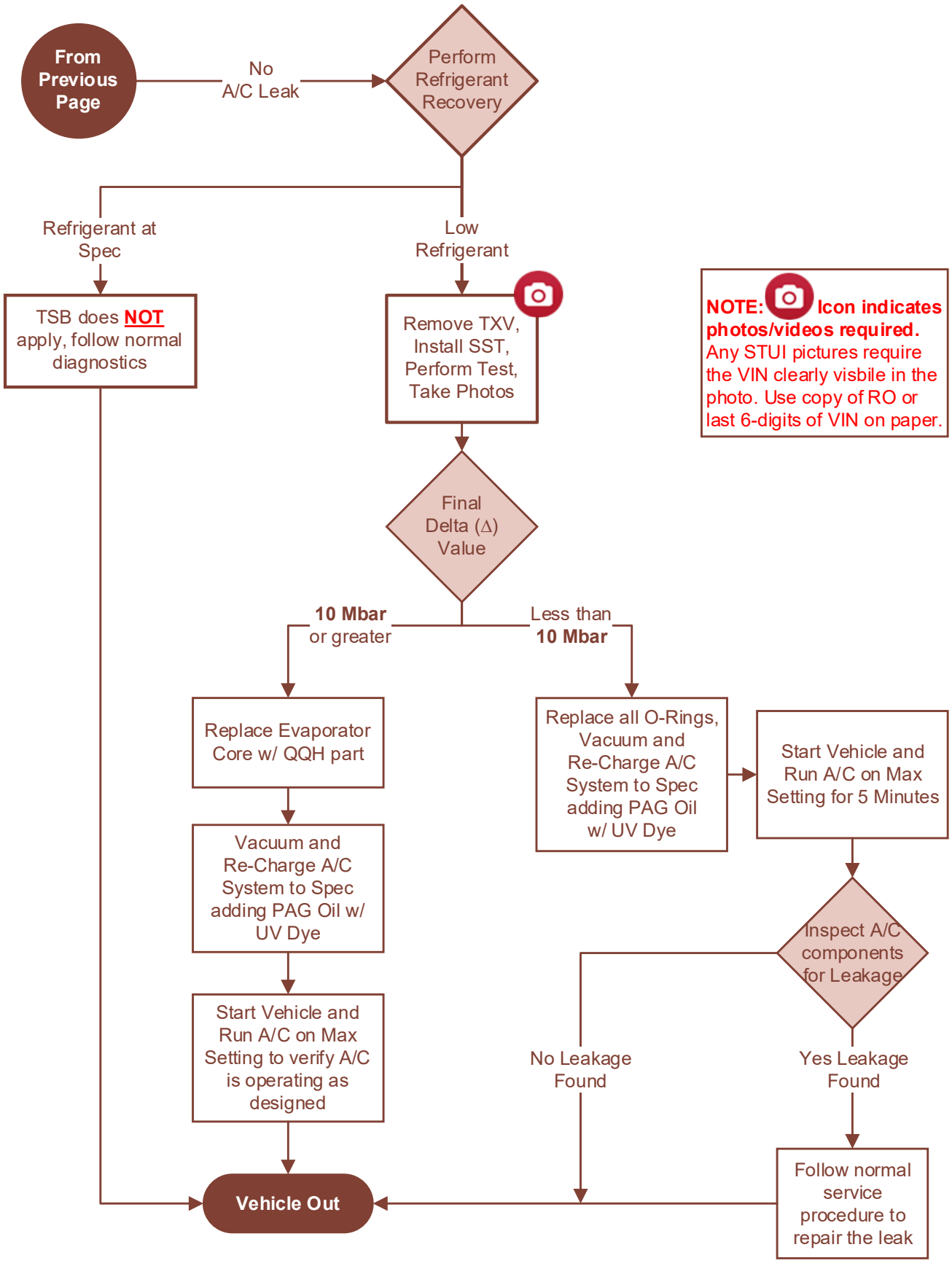
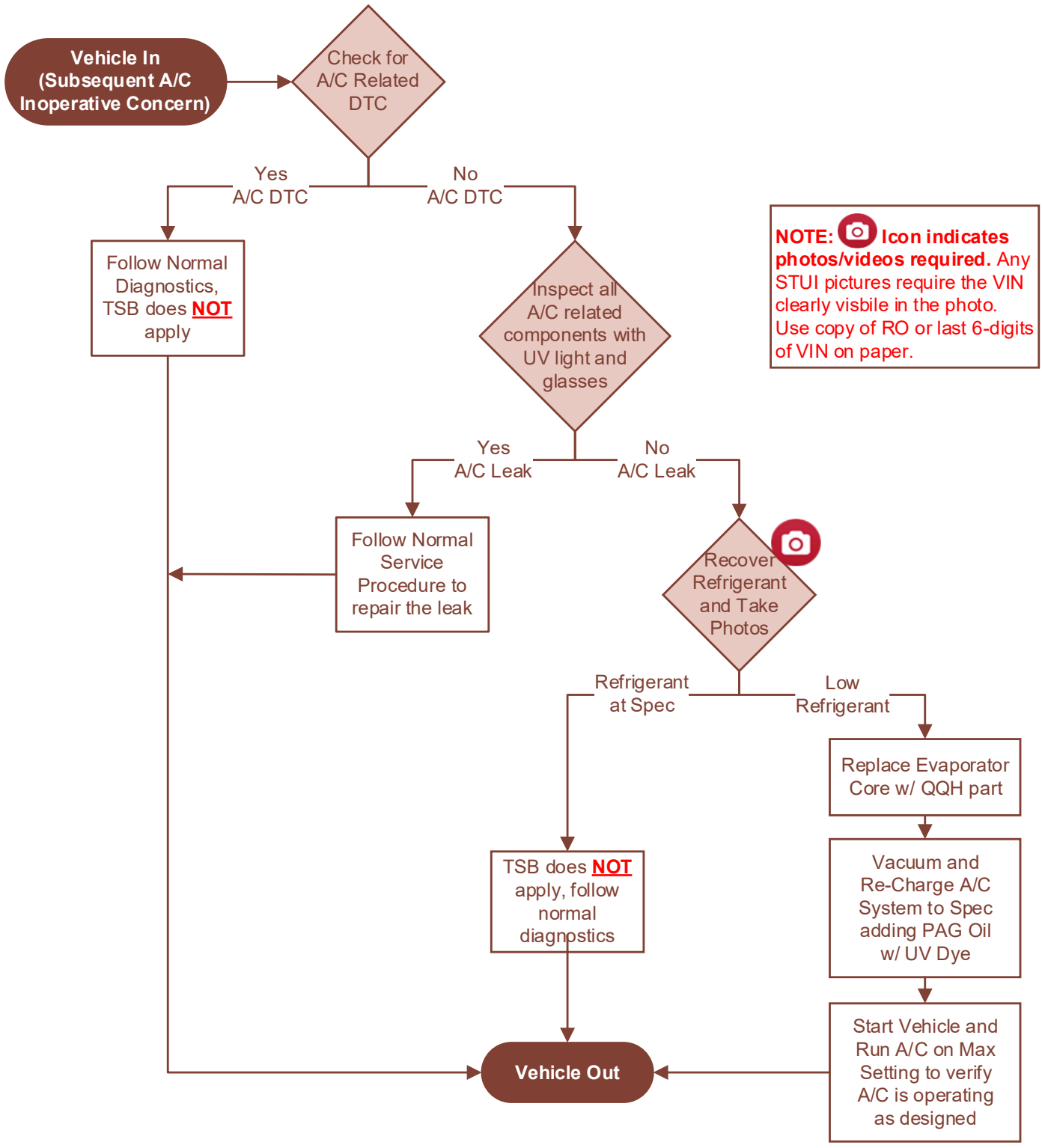
Flowchart - DTC Check and Exterior Leak Inspection



Flowchart - Evaporator Core Leak Inspection and Replacement



Flowchart - Exterior Leak Inspection and Evaporator Core Replacement (Subsequent Dealer Visit)



DTC Check and Exterior Leak Inspection

1. **Information**

   If the vehicle has previously passed the Evaporator Core Inspection procedure (Δ value less than **10 mbar**) proceed to **Exterior Leak Inspection and Evaporator Core Replacement (Subsequent Dealer Visit)** on page **19**.

   Turn on the vehicle and allow the air conditioning system to operate.

2. After **5 minutes**, check each setting below for cold air.

   A/C Setting Mode:
   - Vent Mode
   - Recirculating Air
   - Max Cool
   - A/C on

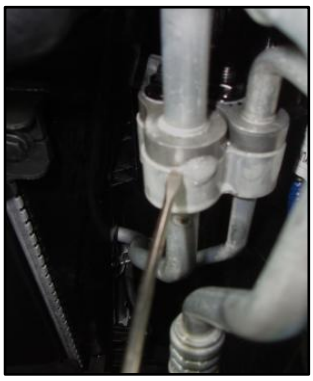
3. If vented air is **NOT** cold, perform a Full Fault Code Search on all vehicles systems in the vehicle and verify there are **NO** AIRCON related DTCs.
   - If DTC is found, follow the appropriate published diagnostic methods to repair the vehicle. This TSB does **NOT** apply.
   - If DTC is **NOT** found, proceed to **Step 4**.

4. Visually inspect the discharge hose and condenser joint for frost oil leak trails.

Information

If **NO** frost oil leak trails are visible, apply a soap and water solution to the outside of the discharge hose and condenser joint to confirm leakage.

If a leak is visible after applying a solution, the O-Ring may be damaged and must be replaced.

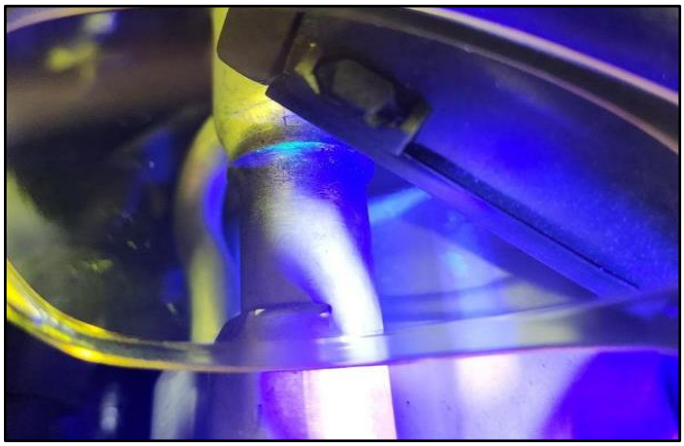


5. Inspect the A/C Condenser for frost oil leaks.

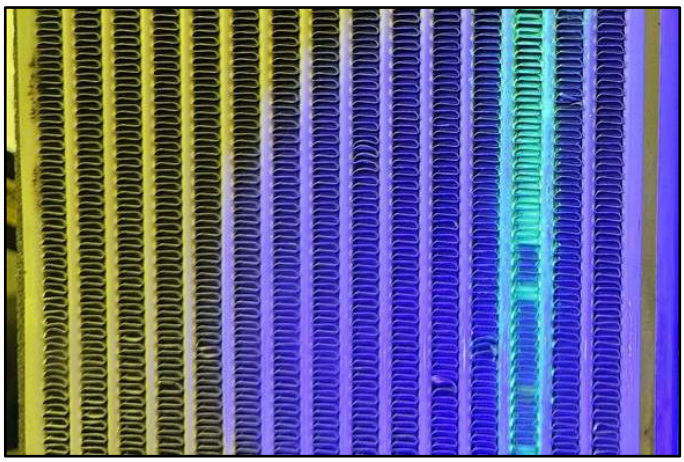
6. Inspect the Suction and Liquid Tube joints and Thermal Expansion Valve for any signs of oil leaks.

Information

The image shows a leak found with UV light after dye was added to the vehicle.



7. For vehicles equipped with Rear HVAC system, inspect the A/C lines that run underneath the vehicle to the Rear HVAC box for leakage.



Information

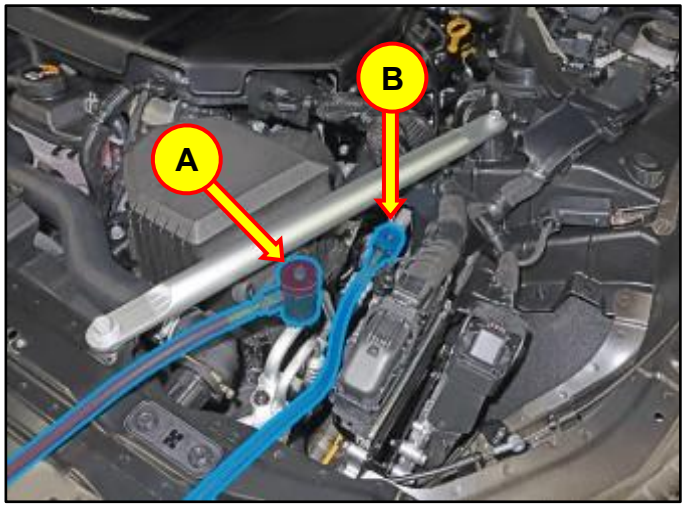
The image shows a Rear Evaporator Core leak found with UV light after dye was added to the vehicle.

- If an external leak is found, follow normal published diagnostics procedures to repair the refrigerant leak. This TSB does **NOT** apply.
- If an external leak is **NOT** found, proceed to the next section to perform the Evaporator Core Leak Inspection and Replacement.

Evaporator Core Leak Inspection and Replacement

1. Record the guest's radio presets and then disconnect the negative battery (−) terminal.

2. Refer to the shop manual to connect the refrigerant recovery/recycling equipment to the high-pressure service port (A) and low-pressure service port (B) and recover the refrigerant.
   - **Heating, Ventilation and Air Conditioning > Air Conditioning System > Refrigerant Recovery.**



Information

Drain or measure the amount of PAG oil in the reservoir prior to recovery to accurately determine how much oil is drained.

3. Measure the amount of PAG oil drained during recovery and record it so that amount can be injected later during the recharging process.

- If the refrigerant level is at specification, this TSB does **NOT** apply.
- If refrigerant level is found to be below specification, proceed to **step 4**.

4. Refer to the Shop Manual to remove the Thermostatic Expansion Valve (TXV):

Information

Draining the engine coolant is **NOT** necessary at this step, remove the TXV without doing so.

- **Heating, Ventilation and Air Conditioning > Heater Unit > Repair Procedures**

Information

- Disconnect the expansion valve block from the suction & liquid pipe.

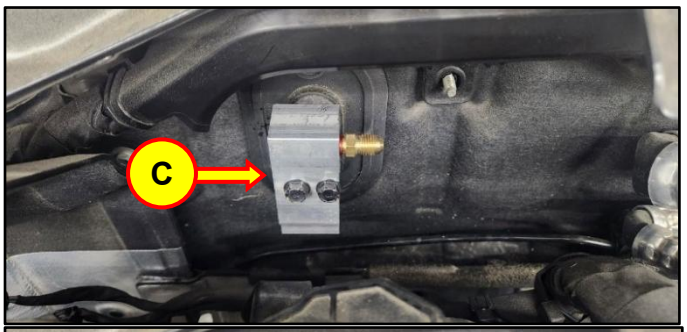
Tightening Torque:

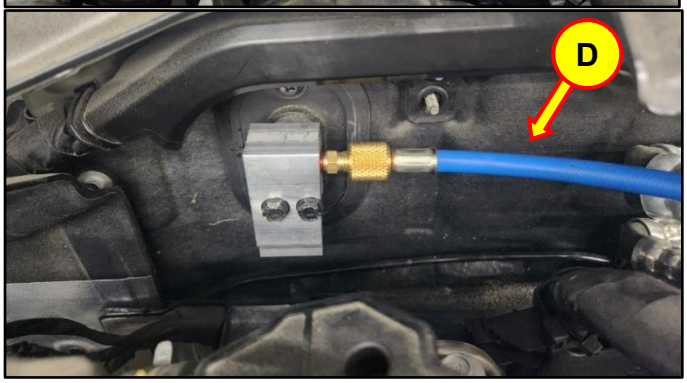
lb-ft	7.3
lb-in	87
N.m	9.8

5. Install the SST TXV (C) to the evaporator core pipe.

Information

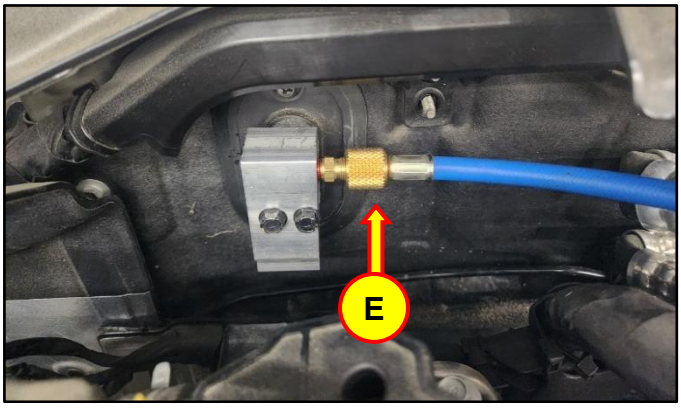
- In tight areas, connecting the supplied refrigerant hose (D) to the SST before tightening may be beneficial.



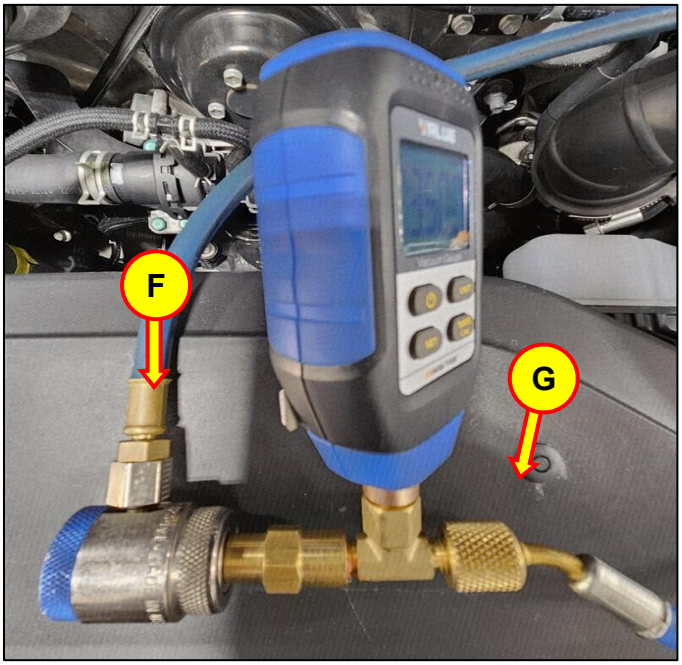


6. Assemble the fitting to the supplied pressure gauge.

7. Connect the refrigerant hose (E) to the expansion valve for the SST if it has not already been completed in step **5**.



8. Connect the low-pressure service port to the assembled pressure gauge (F) and tighten to close. Connect the refrigerant hose to the opposite side (G).



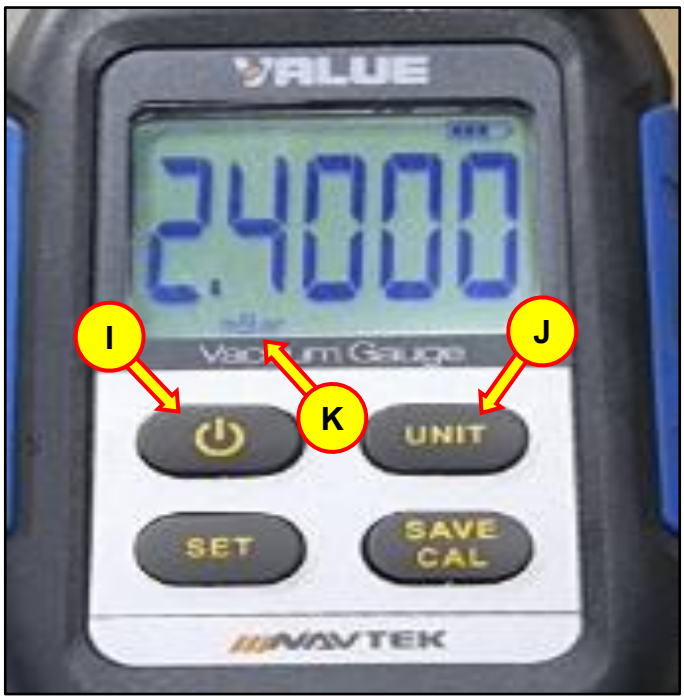
9. Close the high-pressure service port (H) and remove the coupler from the vehicle.

NOTICE

If the high-pressure service port is left closed and connected to the vehicle, it may skew the results.

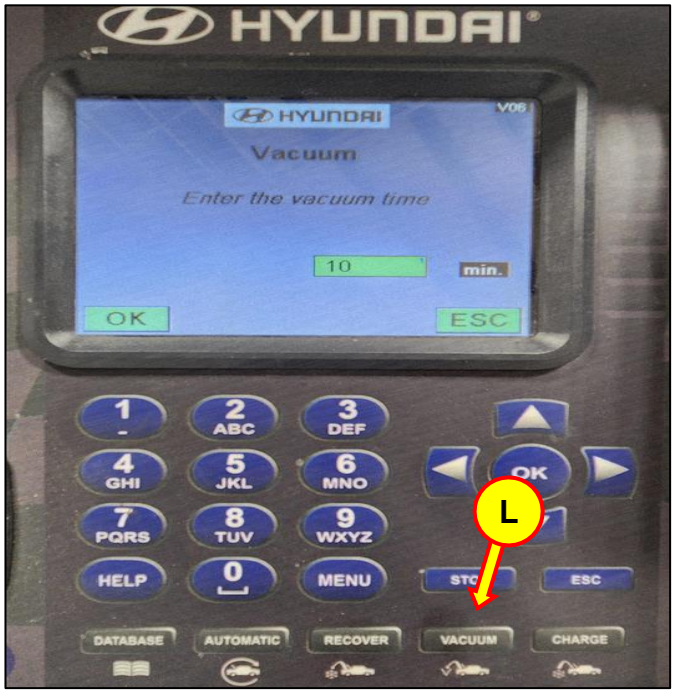
10. Turn on the pressure gauge power by holding the power button (I) for **5 seconds** until the screen turns on.

11. Use the unit button (J) to set the pressure gauge to **mBar** (K).



12. Using the R-1234YF A/C machine, conduct a **10-minute** vacuum on the evaporator core (L).

> **Information**
>
> Be sure the low-pressure service port is securely connected to the pressure gauge. Once the vacuum has begun it may take a few seconds for values to appear on the pressure gauge, this is normal.

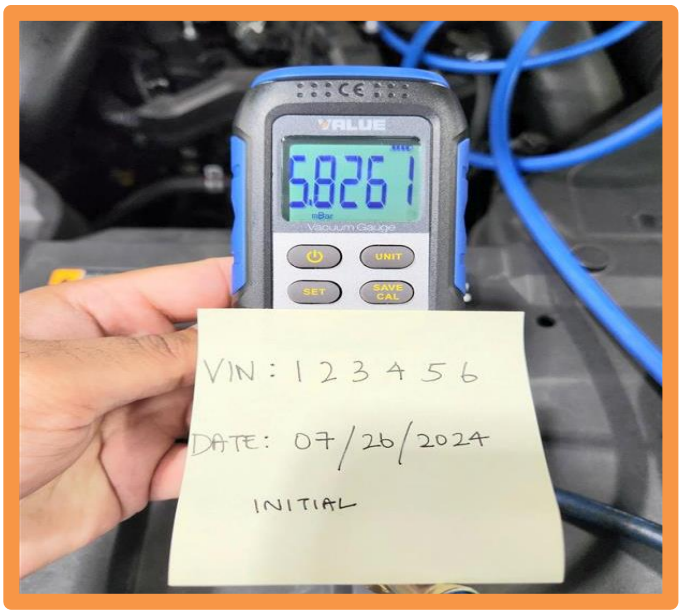


13. At the **9-minute** mark, get ready to record the initial Δ value.

> **Information**
>
> Once the **10-minute** vacuum has completed the value on the pressure gauge will move quickly, be sure to gather the initial Δ value before the vacuum has completed.

14. ***DIGITAL DOCUMENTATION***

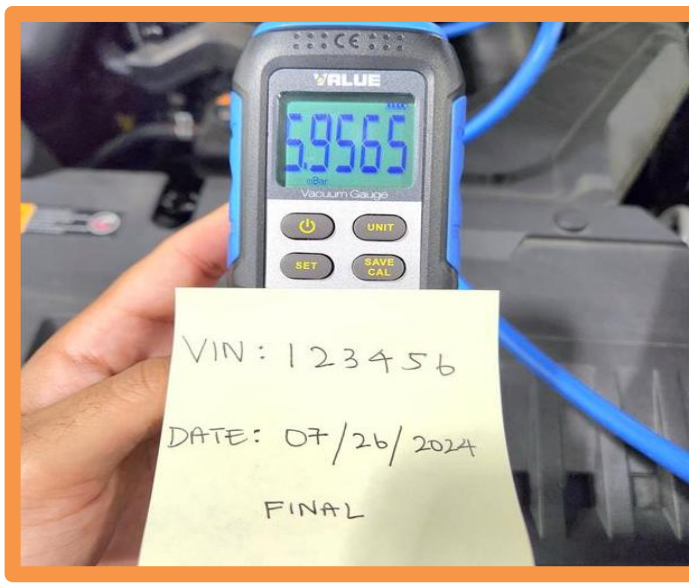
Using STUI, take a photo of the initial Δ value shown on the pressure gauge with the last 6 digits of the VIN and date of repair on a piece of paper. (Be sure to differentiate between the initial and final value).



15. Leave the vehicle unattended for another **10 minutes** and gather the final Δ value on the pressure gauge.

16. ***DIGITAL DOCUMENTATION***

Using STUI, take a photo of the final Δ value shown on the pressure gauge with the last 6 digits of the VIN and date of repair on a piece of paper. (Be sure to differentiate between the initial and final value).



17. Subtract the final and initial Δ value.

Information

Example:

5.95 mBar – **5.82 mBar** = **0.13** (**PASS**)

NO PASS: If the Δ value is **10 mBar** or more, it is determined that there is a large leak at the evaporator core. Refer to the shop manual to replace the evaporator core:

- **Heating, Ventilation and Air Conditioning > Heater > Evaporator Core > Repair Procedures**

PASS: If the Δ value is less than **10 mBar**, it is determined that there is **NOT** an active leak at the Evaporator Core. Proceed to **Step 18**.

Information

The use of dye that contains stop leak additives may cause a false positive result, only use dye that is recommended.

18. Reinstall all parts in reverse order replacing the suction and discharge line O-Rings.

Information

O-Ring Part Numbers:

- 97141-4H900QQH: At Evaporator Core
- 97690-34340QQH: Suction Line
- 97690-34310QQH: Liquid Line

19. Refer to the shop manual to vacuum and recharge the A/C system:
    - **Heating, Ventilation and Air Conditioning > Air Conditioning System > Refrigerant Recovery / Recycling / Charging / Vacuum / Leak Test >**
        - **Refrigerant System Vacuum Operation**
        - **Refrigerant Charge**

Information

Refer to Genesis Tech Information or the under-hood A/C label to determine the refrigerant specification of your vehicle.

20. Use the R-1234YF PAG Oil Syringe Injection tool and add PAG Oil with UV Dye.

    Place the measured amount during recovery back into the vehicle; approx. **3~10 mL**.

21. Start the vehicle and verify A/C operation. Run the vehicle on MAX A/C for about **5 minutes**.

22. Perform a visual inspection with the UV light and glasses to verify there are **NO** external leaks present as shown in **DTC Check and Exterior Leak Inspection** on page **9**.
    - If an external leak is found, follow normal service procedure to repair the leak.
    - If an external leak is **NOT** found and A/C is operating as designed, release the vehicle to the customer.

23. The service procedure is now complete.

Exterior Leak Inspection and Evaporator Core Replacement (Subsequent Dealer Visit)

1.

Information

If the vehicle has previously passed the Evaporator Core Inspection procedure (Δ value less than **10 mbar**) proceed with the following steps.

Turn on the vehicle and allow the air conditioning system to operate.
After **5 minutes**, check for cold air.

2. If vented air is **NOT** cold, perform a Full Fault Code Search on all systems in the vehicle and verify there are **NO** AIRCON related DTCs.
   - If DTC is found, follow the appropriate published diagnostic methods to repair the vehicle, this TSB does **NOT** apply.
   - Proceed to **step 3** if DTC is **NOT** found.

3. Perform a visual inspection with the UV light and glasses to verify there are **NO** external leaks present as shown in **DTC Check and Exterior Leak Inspection** on page **9**.
   - If an external leak is found, follow normal service procedure to repair the leak.
   - If an external leak is **NOT** found and A/C is operating as designed, proceed to **step 4** to replace the evaporator core.

4. Record the guest's radio presets and then disconnect the negative battery (−) terminal.

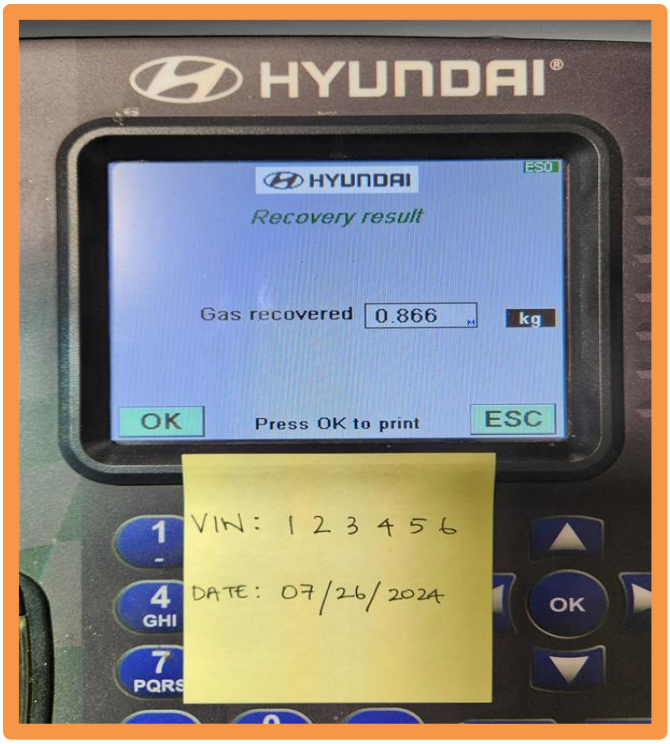
5. Refer to the shop manual to connect the refrigerant recovery/recycling equipment to the high-pressure service port (A) and low-pressure service port (B) and recover the refrigerant.
   - **Heating, Ventilation and Air Conditioning > Air Conditioning System > Refrigerant Recovery.**

Information

Drain or measure the amount of PAG oil in the reservoir prior to recovery to accurately determine how much oil is drained.

6. ***DIGITAL DOCUMENTATION***

Using STUI, take a picture of the recovered refrigerant amount shown on the R-1234YF A/C machine with the last 6 digits of the VIN and date of repair on a piece of paper.



7. Measure the amount of PAG oil drained during recovery and record it so that amount can be injected later during the recharging process.

   - If the refrigerant level is at specification, this TSB does **NOT** apply.
   - If the refrigerant level is found to be below specification, proceed to **step 8**.

8. Replace the evaporator core by referring to the shop manual:
   - **Heating, Ventilation and Air Conditioning > Heater > Evaporator Core > Repair Procedures**

Information

The use of dye that contains stop leak additives may cause a false positive result, only use dye that is recommended.

9. Reinstall all parts in reverse order, replacing the suction and discharge line O-Rings.

10. Refer to the shop manual to vacuum and recharge the A/C system:
    - **Heating, Ventilation and Air Conditioning > Air Conditioning System > Refrigerant Recovery / Recycling / Charging / Vacuum / Leak Test >**
      - **Refrigerant System Vacuum Operation**
      - **Refrigerant Charge**

Information

Refer to Genesis Tech Information or the under-hood A/C label to determine the refrigerant specification of your vehicle.

11. Use the R-1234YF PAG Oil Syringe Injection tool and add PAG Oil with UV Dye.

Information

Place the measured amount during recovery back into the vehicle; approx. **3~10 mL**.

12. Start the vehicle and verify A/C operation.

13. The service procedure is now complete.