ATTENTION:

GENERAL MANAGER ❑
PARTS MANAGER ❑
CLAIMS PERSONNEL ❑
SERVICE MANAGER ❑

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

SERVICE INFORMATION BULLETIN

APPLICABILITY: All Models

SUBJECT: New Procedure and Fail Code for First-Time Undetected A/C Refrigerant Leaks

NUMBER: 10-105-25R
DATE: 05/01/25
REVISED: 03/26/26

INTRODUCTION:

This Service Information bulletin announces the new procedure and Warranty Fail Code for First-Time air conditioning (A/C) performance concerns possibly resulting from an undetected A/C refrigerant leak. To improve Fixed Right First-Time (FRFT) and customer satisfaction, SOA is introducing a new procedure and fail code for first-time suspected A/C refrigerant leaks for cases when a Technician is unable to find the source of the leak or believes there was a potential factory under charge of the A/C system refrigerant.

To ensure proper diagnostic procedures and prevent unnecessary Warranty claims, the current fail code **AVA: A/C Refrigerant Under/Over Charge** will be replaced with **CHR: AC Concern, Technician Unable to Identify Root Cause.**

Warranty Claim Submission Minimum Requirements:

1. Completed A/C Performance Check Worksheet(**ALL PAGES**)
2. Involvement of Techline and DSQM through normal escalation process
3. Submission of a Quality Monitoring Report (QMR) prior to repair order closure, including the A/C performance check worksheet attached (this is a new worksheet)

WARNING: Failure to complete and provide any of the above warranty submission requirements will result in claim rejection.

For any questions related to Warranty claims, contact the Claims team directly.

The information in this document is designed to help guide retailer staff through the recommended diagnostic technique, appropriate fail code selection, and QMR requirements.

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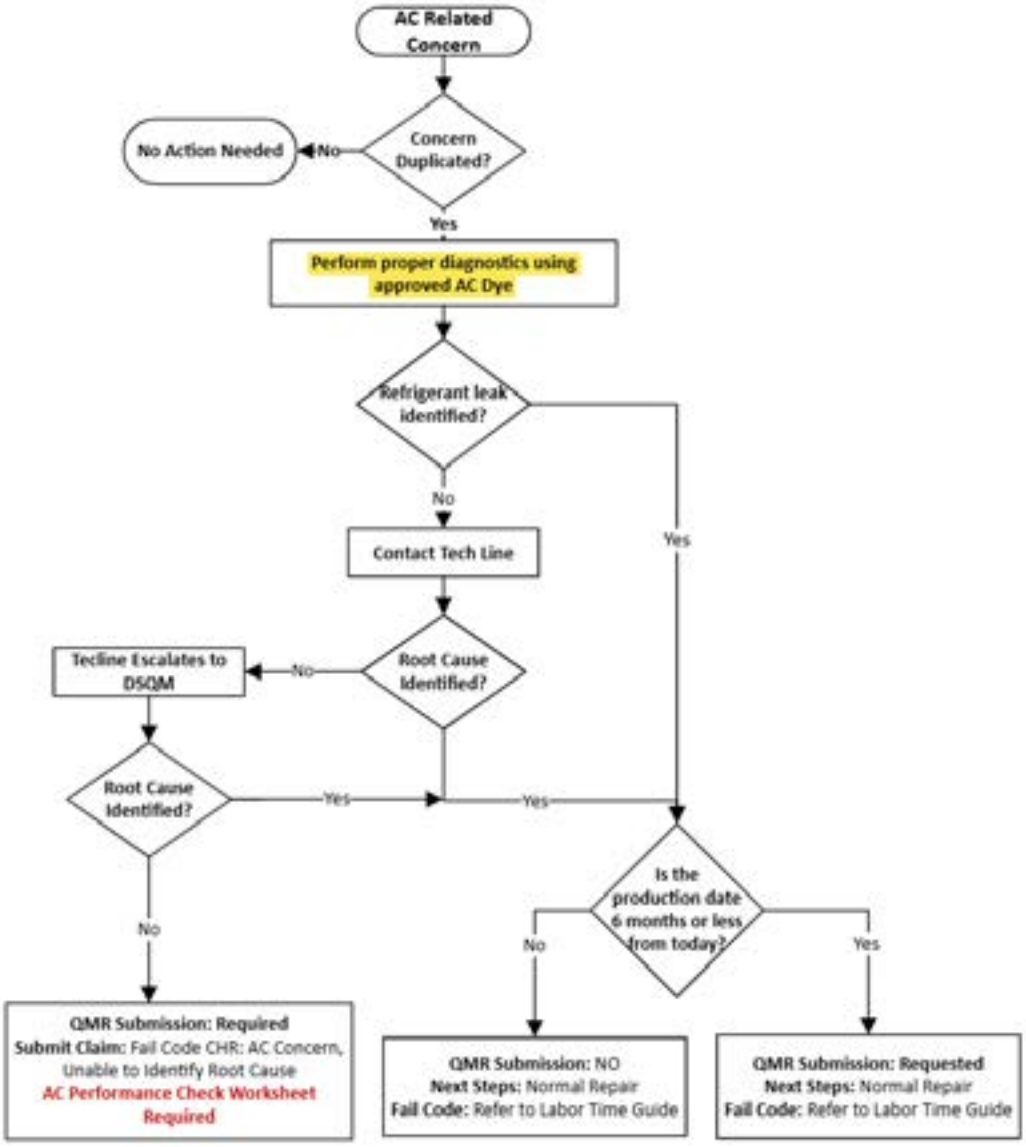
TOOL REQUIREMENTS:

Subaru of America requires the use of Traceline dyes to assist in diagnosing refrigerant leak concerns. Traceline TP3840 can be sourced from many local auto parts suppliers. Traceline TP9815 and the required tools can be purchased at www.subaruretailersolutions.com.

SERVICE PROCEDURE & CLAIM PROCES FLOWCHART:

The following basic flow diagram is meant to support retailers with the proper diagnosis and reporting requirements for AC performance related concerns.



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REFRIGERANT LEAK DETECTION PROCESS:

IMPORTANT: To ensure proper diagnosis, please refer to the SOA Techclips **A/C Leak Check Training video** prior to performing the following steps. (**MUST** be logged into **STAR-U** to access)

WARNING: The Initial Setup & Performance Inspection steps 1 - 5 MUST be completed prior to any evacuation or recharging of the AC system. If the pressures are within specification evacuation and recharge are NOT necessary.

INITIAL SETUP & PERFORMANCE INSPECTION (PRIOR TO LEAK INSPECTION):

1. Connect AC manifold gauges and insert a thermometer in center vents.

2. Refer to the service manual procedure to inspect refrigerant pressures and performance: (Click path) Heating & Air conditioner/Ventilator>Air Conditioner>Refrigerant Pressure with Manifold Gauge Set à Procedure

Standard HVAC Settings for Performance Check

Item	Condition
Engine	Warming-up
Air vent grille	Full open
A/C switch	ON
Temperature setting	Lo (Max Cool)
FRESH/RECIRC position	RECIRC
Air flow control position	Vent
Fan speed	HI (MAX)

3. Conduct an AC performance test: The following characteristics indicate a potential refrigerant leak:

1. Pressures on both the high- and low side are low
2. Pressures on high- and low side are equal
3. High-pressure side is low
4. Low pressure side is low

4. Do not recover refrigerant immediately. If the characteristics are not one of the listed above, refer to the service manual click path Heater & Air conditioner/Ventilation > Air Conditioner > Refrigerant Pressure with Manifold Gauge Set > Inspection. **There is no need to evacuate and recharge for diagnosis.**

5. If AC pressure characteristics are one of the four listed in Step 3, evacuate and recharge according to the applicable service manual and proceed to the Refrigerant Leak Inspection Process below.

REFRIGERANT LEAK INSPECTION PROCESS:

STEP 1: Perform a visual inspection of the A/C components. Look for refrigerant oil stains and any possible physical damage due to impact.

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STEP 2: Determine the type of dye necessary from the chart below.

Vehicle	12MY	13MY	14MY	15MY	16MY	17MY	18MY	19MY	20MY	21MY	22MY	23MY	24MY	25MY	26MY
Outback & Legacy						TP-3840									
Ascent								TP-3840							
Crosstrek & Impreza	TP-3840						TP-3840								
BRZ											TP-3840				
Forester			TP-3840											TP-3840	
WRX				TP-3840											
WRX STi															
SHEV														TP-9815	
Solterra												TP-9815			
Crosstrek Plug in Hybrid								TP-9815							

Step 3 – For vehicles requiring TP-3840 dye: Evacuate and vacuum the system for 30 minutes. For vehicles requiring TP-3840, inject 3 grams of dye into the low-side service port, then recharge the system according to the applicable service manual. Finally, run the vehicle with the A/C set to max. for 30 minutes.

Step 3 – For vehicles requiring TP-9815 dye:
Evacuate and vacuum the system for 30 minutes. Recharge the system according to the applicable service manual. With the A/C system not operating, unscrew the EZ-Ject dye handle completely and screw the dye cartridge into it. Hold the cartridge vertically with the small cap on top. Remove the cap and screw the cartridge firmly onto the coupler. Turn the handle to advance the plunger until a small amount of dye exits the assembly. Remove the adapter/purge fitting—the coupler is now purged. Connect the coupler to the low-side service port on the vehicle. Turn the plunger until 3 grams of dye are injected. Start the vehicle and run it for 30 minutes with the A/C set to max.

STEP 4: Using the UV light, check the following areas:

Under Hood

1. Pipe-to-expansion valve connections (especially high-pressure side).
2. Pressure sensor connection and T-fitting.
3. Welded joints along the liquid line to the condenser.

Condenser

4. Pipe/condenser connection (bottom side).
5. Low-pressure hose connection before the heat exchanger.
6. Welded sections and receiver/dryer.

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7. Inspect condenser face for damage (rock chips).

Compressor & Hoses

8. High-pressure hose-to-compressor and condenser connections.
9. Flexible rubber hoses (watch for slow leaks).
10. Service port check.
11. Check compressor (note: shaft seals may allow minor acceptable leakage).

Low-Pressure Side

12. Expansion valve outlet.
13. Compressor low-pressure line & service port.

Evaporator & Interior Components

14. Rear evaporator lines and connections.
15. Evaporator drainage test after running the blower.
16. Inspect inside vents for refrigerant traces.

STEP 5 : Has the source of the leak been identified?

Yes: Perform the repair following the applicable Service Manual. If the vehicle is within 6 months of its production date, consider submitting a QMR to help support quality initiatives.

No: Proceed to Step 6.

STEP 6 : Escalate to Techline:

Has the source of the leak been identified after working to identify the leak with Techline?

Yes: Perform the repair following the applicable Service Manual. If the vehicle is within 6 months of its production date, consider submitting a QMR to help support quality initiatives.

No: Techline will proceed with the normal escalation process and escalate the case for District Service & Quality Manager (DSQM) involvement.

STEP 7 : DSQM Technical Assistance:

Has the source of the leak been identified during DSQM technical assistance?

Yes: Perform the repair following the applicable Service Manual. If the vehicle is within 6 months of its production date, consider submitting a QMR to help support quality initiatives.

No: A Quality Monitoring Report (QMR) is required for any AC condition where the source of the leak cannot be identified and Fail Code CHR is used prior to repair order closure. The report MUST include the following:

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WARRANTY / CLAIM INFORMATION:

IMPORTANT: Claims for vehicles within the New Car Adjustment period, will require a Quality Monitoring Report (QMR) prior to repair order closure, A Techline Case # and DSQM Technical Assistance for any AC condition where a root cause cannot be identified and Fail Code CHR is used. The report MUST include the following:

- A completed A/C performance worksheet (accessed in the service procedure or at the end of this document.
- Customer complaint details (EXAMPLE: weak cooling, no cooling, poor A/C performance) and duplication. Note: The customer concern must be duplicated to qualify for a CHR Claim.
- Assistance through the normal escalation process with support from Techline and/or the District Service & Quality Manager (DSQM).

Labor Description	Labor Operation #	Labor Time	Fail Code
AC CONCERN, UNABLE TO IDENTIFY ROOT CAUSE	A704-101	1.7h	CHR-88

IMPORTANT: Effective June 1st, 2025 retailers MUST start the implementation of fail code CHR. Fail Code AVA should no longer be used for first-time A/C refrigerant leak concerns where the root cause cannot be identified. All claims' submissions with a repair start date of June 1st or later are subject to audit.

AC Performance Check Worksheet

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.

AC Performance Check Worksheet (Complete both pages!)

Technician Name:

Date:

VIN:

Mileage:

Initial Checks & Setup

- Confirmed CHR or AVA Fail Code has never been used. (One-time use)
- Confirmed no history of AC Related Repair or Evacuation & Recharge
- AC manifold gauges connected
- Thermometer inserted in center vents

AC Performance Test Results:

Reference the appropriate service manual on STIS using click path: [Heater & Airconditioner/Ventilator -> Heater & Airconditioner/Ventilator -> AIR CONDITIONER -> Refrigerant Pressure with Manifold Gauge Set -> PROCEDURE] for specifications.

Vent Temperature: °F (Target <50°F)

Ambient Temperature: °F

High-Side Pressure: PSI

Low-Side Pressure: PSI

Customer Concern Duplicated?: Yes No (If No, STOP here! CHR should only be claimed when AC performance is not within specification. Please use No Problem Found)

Refrigerant Amount Recovered: Grams kg

Specification: Grams kg

Step-by-Step Leak Detection

Visual Inspection:

- No visible oil stains, rock chips, or damage on any components
- Signs of potential leak (describe below)

AC Dye Inspection Preparation:

- System fully charged & Dye installed
- Run vehicle for 30 minutes in well ventilated area
- Shut off engine and inspect AC system for leaks using UV light.

Continue to next page

Leak Detection Sequence:

Under Hood:

Pipe-to-expansion valve connections - No leak / Leak detected

Condenser:

Pipe/condenser connection - No leak / Leak detected/ No Impact Marks on Fins

Compressor & Hoses:

High-pressure hose-to-compressor connections - No leak / Leak detected

Low-Pressure Side:

Expansion valve outlet - No leak / Leak detected

Evaporator & Interior Components:

Rear evaporator lines & connections - No leak / Leak detected

Leak Identified? Yes No

If **No**, Techline escalation is required.

Summary & Findings

Contacted Techline? Yes **Techline Case #:**

DSQM Contacted? Yes No

Leak Found? Yes No(see note below)

By selecting No to this question, you are agreeing that all proper diagnostic and escalation steps have been taken prior to QMR submission. The use of fail code CHR: AC Concern, Technician Unable to Identify Root Cause is now permitted. Should a vehicle return with a leak within 6 months of the claim, the CHR: AC Concern, Technician Unable to Identify Root Cause claim will be debited.

QMR Submitted? Yes No

QMR #:

Location of Leak(s):

Repair Actions Taken: