

[A.] Customer & Vehicle Information

Year/Make/Model:	Ticket #:
VIN:	Mileage:
Name:	Date:
Complaint / symptom:	

[B.] Tools, Legal & Safety

Tools required: correct manifold gauges, accurate thermometer/IR temp tool, scan tool, digital multimeter, UV dye/UV light or electronic leak detector, PPE. Opening the refrigerant circuit requires appropriate recovery equipment and legal compliance.

⚠ Refrigerant is under high pressure and may cause frostbite or eye injury. Some refrigerants are mildly flammable. Do not vent or mix refrigerants; work ventilated and away from ignition sources.

[C.] Initial Conditions / Sensor Data

Actual Ambient	Scan-tool Ambient	Vent Temp	Sunload Reading
°F	°F	°F	

Ambient sensor agrees: ☐ Yes ☐ No A/C blows cold: ☐ Yes ☐ No Unusual compressor/belt noise: ☐ Yes ☐ No
Cabin filter condition: Visual oily residue/damage:

[D.] Refrigerant Pressure & Performance

Refrigerant: ☐ R-134a ☐ R-1234yf ☐ Other		Static pressure: PSI
Condition	Low Side PSI	High Side PSI
Idle		
Elevated RPM		

Superheat: °F Subcooling: °F Compressor operation: ☐ Normal
☐ Abnormal Cycling/pressure switch: ☐ Normal ☐ Abnormal ☐ N/A

[E.] Electrical / Clutch Control

Scan-tool clutch ON request: ☐ ON ☐ OFF Actual clutch: ☐ Engaged ☐ Disengaged
If requested ON but clutch does not engage, clutch connector voltage: V
Fuse/relay status: Pressure sensor/switch reading:

[F.] Airflow / Blend Door / Fan

Condenser fan(s) with A/C: ☐ Operational ☐ Inoperative Condenser face: ☐ Clean ☐ Restricted/Damaged
Blend door: ☐ Full hot ☐ Full cold ☐ Full travel ☐ Restricted/Sticking ☐ Inoperative
Commanded position: % Actual/feedback: % Mode door: ☐ Panel ☐ Floor ☐ Defrost ☐ All correct Recirculation: ☐ Normal ☐ Abnormal

[G.] Thermal Imaging / Restriction Test

Performed: ☐ Yes ☐ No Pattern: ☐ Normal ☐ Restriction suspected ☐ Abnormal temperature change
Component/location: Condenser ΔT: °F Drier/filter ΔT: °F
Frost location: ☐ TXV/orifice ☐ Drier ☐ Line Screen condition: ☐ Clean ☐ Debris ☐ Metal shavings

[H.] Refrigerant Leak Diagnosis

Leak detected: ☐ Yes ☐ No Method: ☐ UV dye ☐ Pressure decay ☐ Electronic detector ☐ Other
Leak location:
Sight-glass/sample inspection obtained: ☐ Yes ☐ No ☐ Clear/Normal ☐ Discolored ☐ Metallic ☐ Debris ☐ Excessive dye

[I.] Isolated Pressure Testing - If Leak Cannot Be Located

Isolated Section	Test Pressure PSI	Ending Pressure PSI (15 min)
High Side		
Low Side		
Evaporator		
Condenser		