 HYUNDAI NEW THINKING. NEW POSSIBILITIES.	GROUP CAMPAIGN	NUMBER 16-01-022-1
	DATE MAY 2016	MODEL(S) ELANTRA 2.0L (ADa)

Technical Service Bulletin

SUBJECT: A/C SUCTION & LIQUID TUBE REPLACEMENT
(SERVICE CAMPAIGN TEE)

This TSB supersedes TSB 16-01-022 with enhancements to the Service Procedure to improve the installation process and includes a step for checking the installed clearance.

★ IMPORTANT

*** Dealer Stock and Retail Vehicles ***

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.

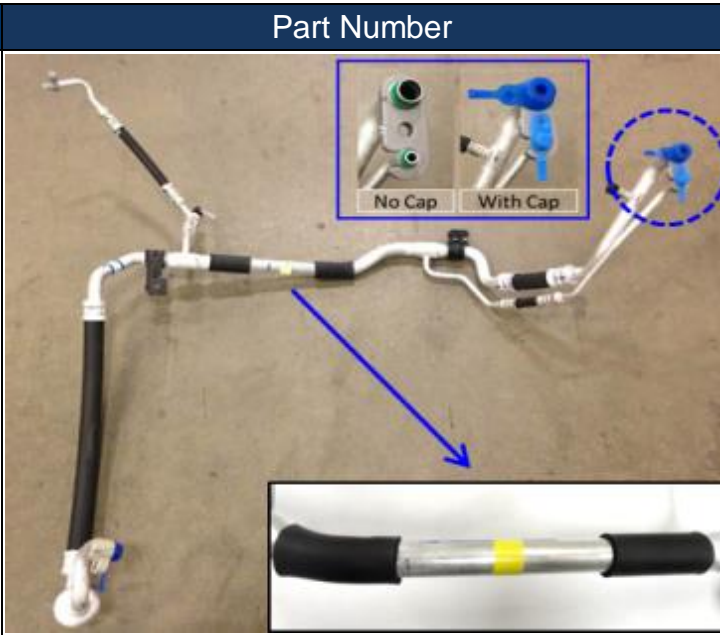
When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: Some Elantra 2.0L (ADa) vehicles may experience an inoperable air conditioning system with the vented air being warmer than normal when the A/C is selected in the cold temperature setting. This condition may be due to an A/C refrigerant leak from a portion of the Suction & Liquid Tube Assembly.

Follow the procedure outlined in this bulletin to replace the Suction & Liquid Tube Assembly to correct this condition.

Applicable Vehicles: Certain 2017 ELANTRA (ADa) 2.0L vehicles

Parts Information:

Part Name	Part Number	Comment
TUBE ASSY – SUCTION & LIQUID		<p>New campaign parts can be identified with a YELLOW colored tape wrapped at the middle of the tube assembly.</p> <p>In addition, the connection points to the thermal expansion valve (TXV) and the condenser may have protection caps. Any caps must be removed during assembly.</p>
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Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Warranty Information:

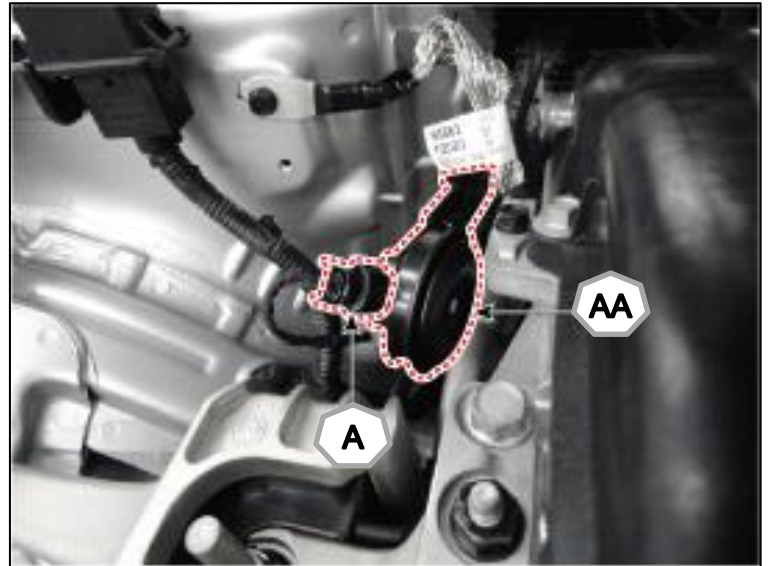
Model	Op Code	Operation	Op Time
ELANTRA ADa 2.0L	60CA03R0	TUBE ASSY - SUCTION & LIQUID REPLACEMENT	1.2 M/H

NOTES:

- Submit Claim on Campaign Claim Entry Screen.
- Labor Operation shown includes reimbursement of refrigerant.

Service Procedure:

1. If the A/C compressor is still operable, run the engine at idle speed, and operate the air conditioning (maximum blower at coldest temperature setting with A/C ON) for a few minutes, then shut the engine off.
2. Record the radio presets and then disconnect the negative (-) battery terminal.
3. Recover the refrigerant with an A/C recovery/charging station.
4. Remove the burglar alarm horn with bracket (AA) after disconnecting the connector (A) and removing the rearmost mounting bolt.
 - **Tightening torque: 8 lb-ft (1.12 kgf.m; 11.0 Nm)**

**CAUTION**

Be sure to complete the evacuation of refrigerant before beginning next step.

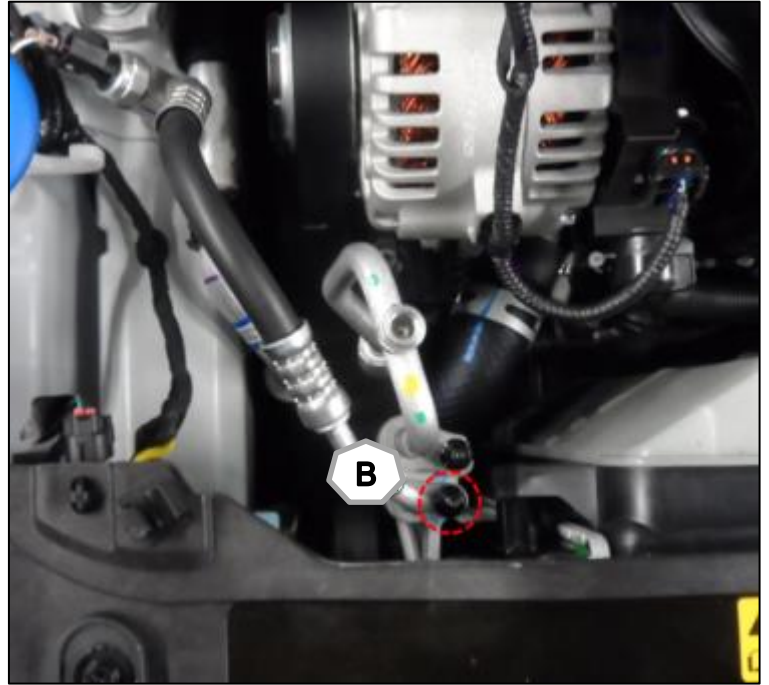
5. Remove the suction and liquid pipe flange fastening bolt (12mm) from the side of the Thermal Expansion Valve (TXV) and detach suction and liquid pipe from the TXV.
 - **Tightening torque: 16 lb-ft (2.24 kgf.m; 22.0 Nm)**

NOTICE

Do not remove the TXV from the vehicle. Leave it attached to the evaporator.



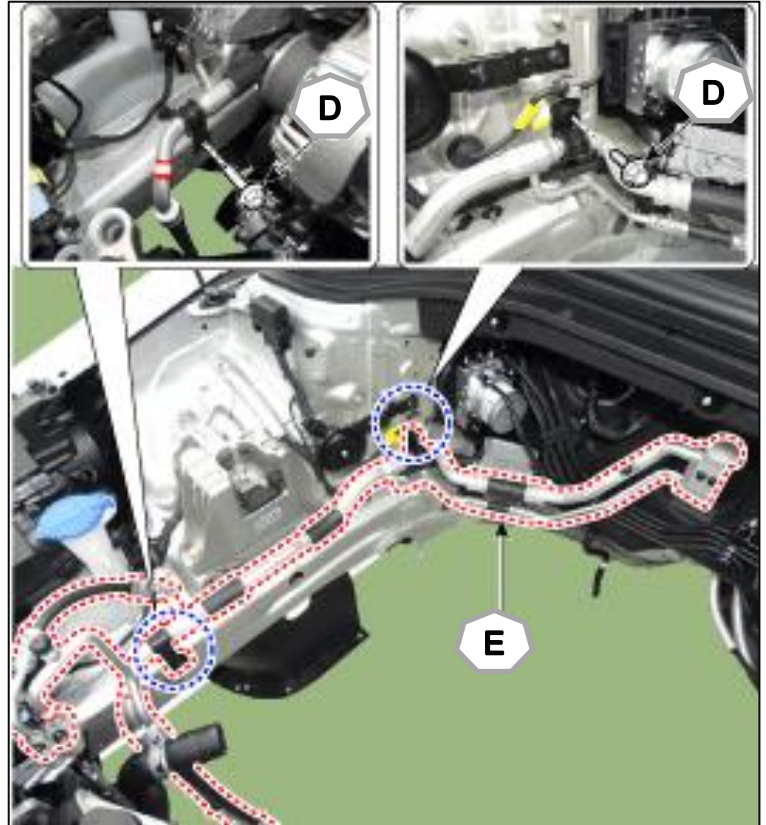
6. Remove the fastening nut and then disconnect the liquid line (B) from the condenser.
 - **Tightening torque: 8 lb-ft (1.12 kgf.m; 11.0 Nm)**



7. Disconnect the A/C pressure transducer harness connector (C).
8. Refer to the Shop Manual to remove the Engine Room Under Cover.
 - **Section:** Engine Mechanical System > Engine and Transaxle Assembly > Engine Room Under Cover > Repair Procedures
9. Remove the fastening bolt and then disconnect the suction line from the compressor.
 - **Tightening torque: 20 lb-ft (2.75 kgf.m; 27.0 Nm)**



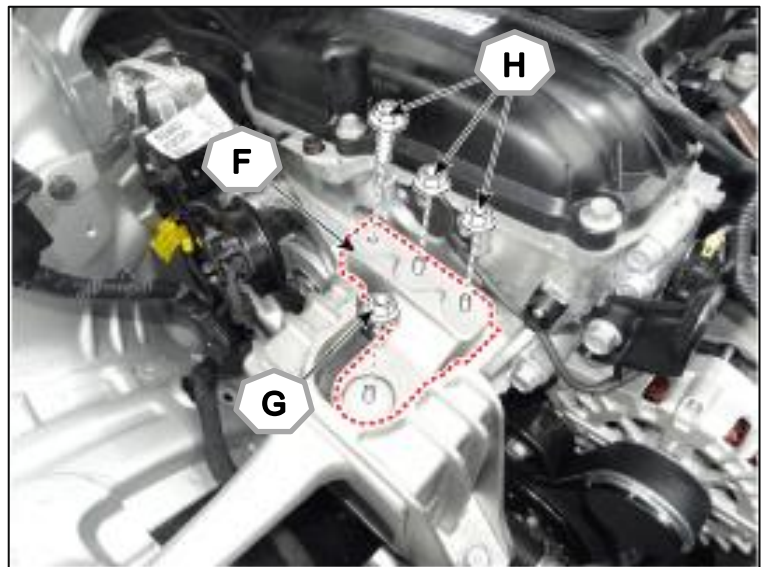
10. Loosen the bracket mounting bolts (D) from the suction & liquid assembly (E).
- **Tightening torque: 8 lb-ft (1.12 kgf.m; 11.0 Nm)**



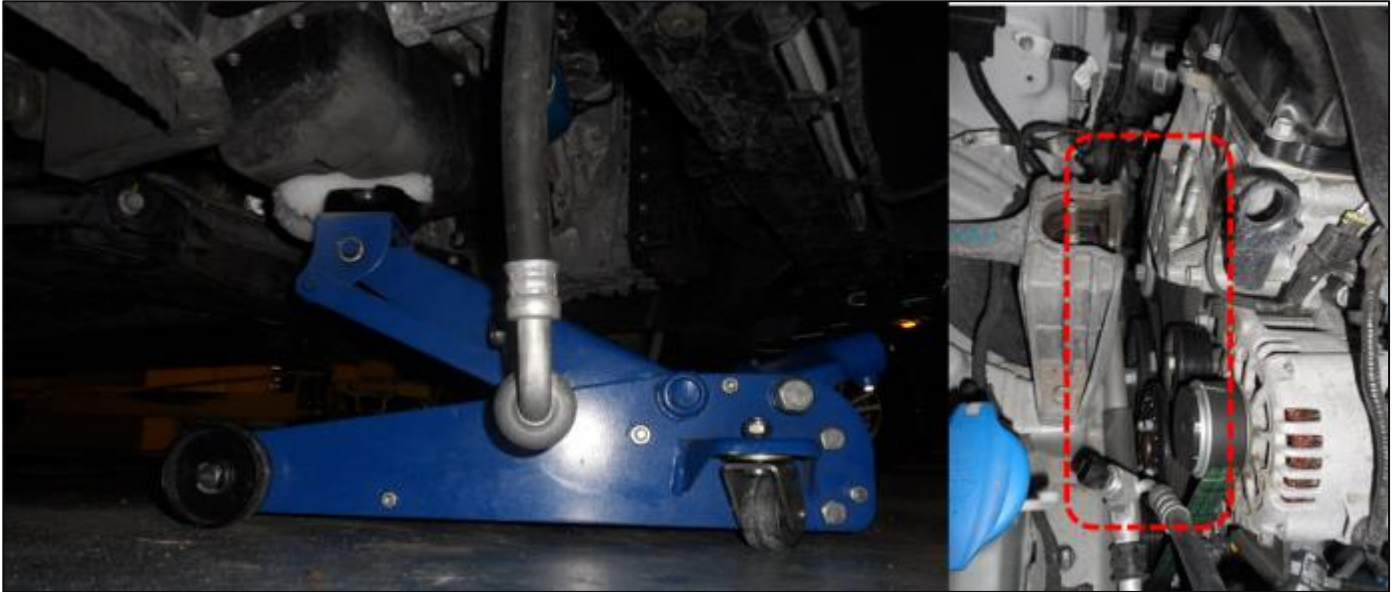
11. Position a floor jack under the engine oil pan to support the engine weight and then remove the fastening bolts to the engine mounting support bracket (F).
- **(Fastener G) Tightening torque: 72 lb-ft (9.99 kgf.m; 98.0 Nm)**
 - **(Fastener H) Tightening torque: 49 lb-ft (6.73 kgf.m; 66.0 Nm)**

NOTICE

Protect the engine oil pan from damage by placing some foam padding or a wooden block between it and the floor jack lift cup.



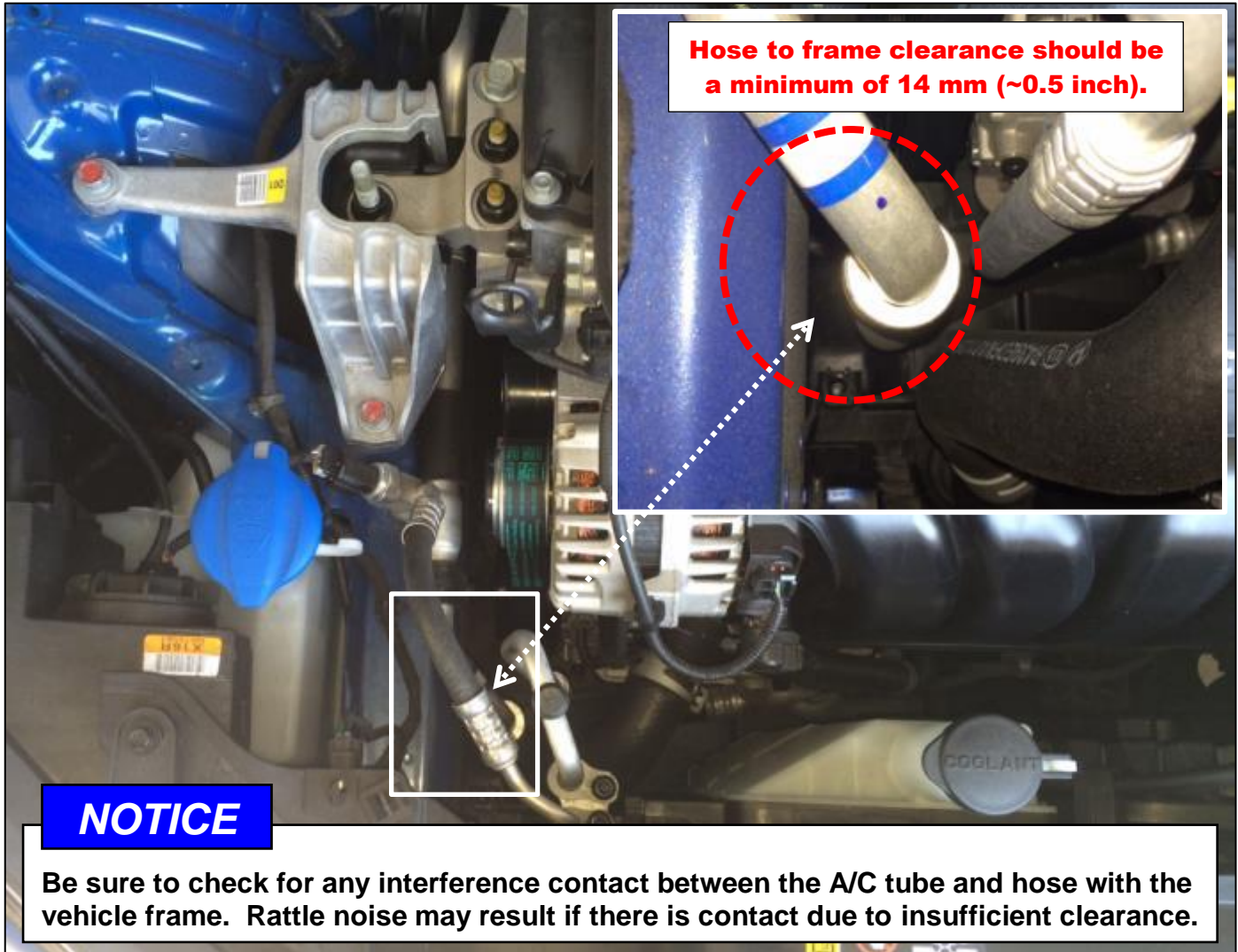
12. Raise the engine slightly higher with the floor jack to provide additional clearance to remove the suction and liquid pipe from the vehicle.



13. Install the new suction and liquid pipe in the reverse order of removal.

NOTICE

- **Ensure that the new suction and liquid pipe is positioned properly in the mounting bracket.**
 - **Ensure O-ring seals are installed and do not get pinched when installing.**
 - **Check for proper isolation so that it is not touching any part of the body structure.**
 - **Check for interference and sufficient clearance with any moving components inside the engine compartment.**



NOTICE

Be sure to check for any interference contact between the A/C tube and hose with the vehicle frame. Rattle noise may result if there is contact due to insufficient clearance.

14. Evacuate the air in the system by performing a sufficient vacuum pull and air leak check procedure, then recharge the A/C system with refrigerant.
 - R134A Refrigerant Capacity: 500 grams (1.1 lbs.)

NOTICE

Using a gas leak detector, check for any refrigerant leakage along the connection points and hose-to-pipe crimp points.

15. Verify repair.
 - Reconnect the negative (-) battery terminal.
 - Operate the A/C system to ensure that cold air is flowing from the vents.
 - Reset the radio presets.