



Technical Service Bulletin

GROUP CAMPAIGN	NUMBER 22-01-089H
DATE DECEMBER 2022	MODEL(S) ELANTRA (MD/UD)

SUBJECT: UNDERBODY CORROSION PREVENTATIVE SERVICE
(SERVICE CAMPAIGN 984)

★ IMPORTANT

Dealers must perform this service campaign 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: In certain areas, a vehicle's underbody may exhibit corrosion due to road-salt usage. As a preventative measure, a cavity wax coating is applied to the internal surfaces of underbody components and an undercoating spray is applied to exterior surfaces of specified underbody components. This bulletin describes the procedure to perform this preventative service on certain 2011 – 2016 Elantras (MD/UD).



Applicable Vehicles: Certain 2011-2016MY Elantra (MD/UD) currently or ever registered in a Salt Belt State produced from 10/29/2010 - 12/22/2015

Salt Belt Areas include:

Connecticut, Delaware, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin, and the District of Columbia.

Please note all dealers must perform this service campaign if vehicle comes in with an open campaign, even if vehicle is no longer located in the listed states above.



Information

Allow the vehicle to cool at least four hours before performing the procedures in this TSB. Parking the vehicle at the stall overnight is highly recommended to avoid a need for a cool down period and improve work efficiency.

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

Table of Contents

Warranty Information:.....2

Parts Information:3

Recommended Tools and Equipment:.....4

Service Procedures:5

Wax Gun Preparation:.....5

Remove Debris:7

Vehicle Preparation:.....10

Apply Cavity Wax:11

Apply Undercoating:13

*** IMPORTANT**

There are circumstances under which vehicles that are not currently registered or have never been registered in a “salt belt” state may be eligible for this service campaign. These circumstances include:

Vehicles that were relocated into a “salt belt” area and/or vehicles registered in a “non-salt belt” state and driven in a “salt belt” area. If it is determined that an owner of a vehicle within the affected VIN production date range relocates or has operated their vehicle in a “salt belt” area, the dealer should perform the campaign procedure. The dealer should perform this procedure at no cost to the customer, and the Warranty Prior Approval (PA) Center must be contacted prior to repair and submission of the warranty claim.

Warranty Information:

Model	Op Code	Description	Op Time	Causal Part	Nature	Cause
Elantra (MD)	20D145R0	UNDER BODY RUST INSPECTION AND PREVENTIVE SERVICE	0.8 M/H	62400-3X000	A12	ZZ6
Elantra (UD)	20D145R1			62400-3Y000		

NOTE 1: Submit Claim on Campaign Claim Entry Screen.

NOTE 2: Each labor operation will reimburse 1 can of undercoat spray and cavity wax.





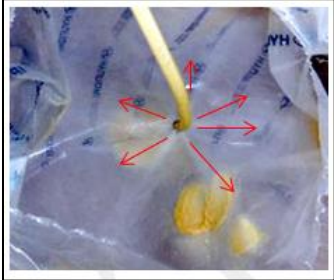
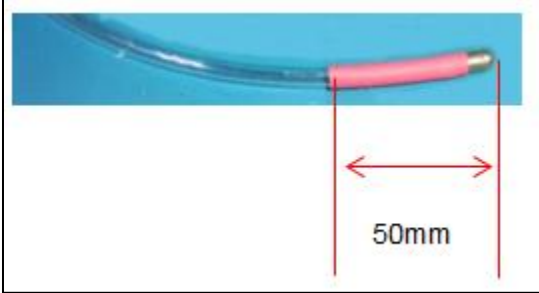
NOTE 3: If a part that is not covered by this campaign is found in need of replacement while performing the service campaign and the affected part is still under warranty, submit a separate claim using the same repair order. If the affected part is out of warranty, submit a Prior Approval request for goodwill consideration prior to the repair.

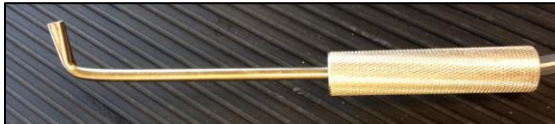
NOTE 4: All claims must have STUI pictures uploaded as directed on page 15 of the TSB. Claims with illegible, incomplete, missing, or incorrect STUI pictures are subject to debit.

Parts Information:









! DANGER

- This procedure must be performed in a well-ventilated area.
- Must wear safety goggles, face protection, and gloves. Rinse eyes with water or skin with soap and water. Do not inhale spray. Seek medical attention if needed.
- Flammable & pressurized. Do not spray near flames, sparks, or heated areas. Do not pierce can.

Part Name	Image / Part Number	Remark
Cavity Wax		Use about half a can per vehicle.
	00232-19034	
Undercoat Spray		Use about 1 can per vehicle.
	00232-19035	
Wax Spray Gun		Set air pressure to 70 psi. <i>If wax output is slow</i> , prime the gun by covering the nozzle with a rag, and spraying the gun until the flow of wax increases.
	00232-19036	
"Inside" Nozzle		This is a newly developed nozzle that has an improved wax application spray pattern.  The pink tubing is to signal the user to stop spraying when pulling the nozzle out. <u>This nozzle must be used for this service procedure.</u>
		
	09624-2H101-QQH	

"Outside" Nozzle		This nozzle is supplied with the wax gun.
------------------	--	---

Recommended Tools and Equipment:

Tool Name	Image	Remark
Air Nozzle		-
Safety Goggles		-
Face Mask		-
Gloves		-
Rubber/Plastic Mallet		-
Wire Brush		-
Plastic bags		Bags large enough to cover the tires and wheels.
Tape		-

STUI



This TSB includes STUI pictures as a requirement. Where indicated, please include the last 6 digits of the VIN and date of repair on a piece of paper. Ensure the VIN and date of repair are clearly visible. Finally, please ensure all captured pictures are completed according to the steps in this TSB and uploaded to STUI. All claims submitted that have illegible, incomplete, missing, or incorrect picture(s) are subject to debit.

Service Procedures:

Wax Gun Preparation:

! DANGER

- This procedure must be performed in a well-ventilated area.
- Must wear safety goggles, face protection, and gloves. Rinse eyes with water or skin with soap and water. Do not inhale spray. Seek medical attention if needed.
- Flammable & pressurized. Do not spray near flames, sparks, or heated areas. Do not pierce can.

1. Unscrew the nut to remove the compression fitting from the nozzle assembly that originally comes with the wax gun.



2. Attach the compression fitting to the tubing on the new nozzle assembly.



3. Fill wax gun reservoir with cavity wax.

Prime the wax gun by spraying the wax into a trash bag (or similar) until a light mist is visibly coming out of the nozzle.

i **Information**

Set air supply pressure to 70 psi.

Prime the wax spray gun to increase the flow when the mist is no longer visible.

To optimize the priming process, cover the nozzle with a rag and spray until the flow has increased.



Remove Debris:

WARNING

Must wear safety goggles and a face mask during this procedure to protect eyes and prevent debris from being inhaled.

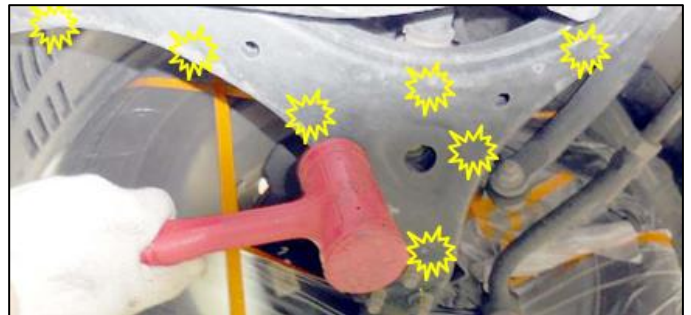
1. Lift the vehicle on a hoist.

Apply a plastic vinyl sheet on the floor.

If equipped, remove plastic undercovers to gain access to the front sub-frame, brake, and fuel tubes.



2. Lightly tap the vehicle underbody components with a rubber or plastic mallet to loosen and remove debris.



Front sub-frame



Left and right front lower control arms



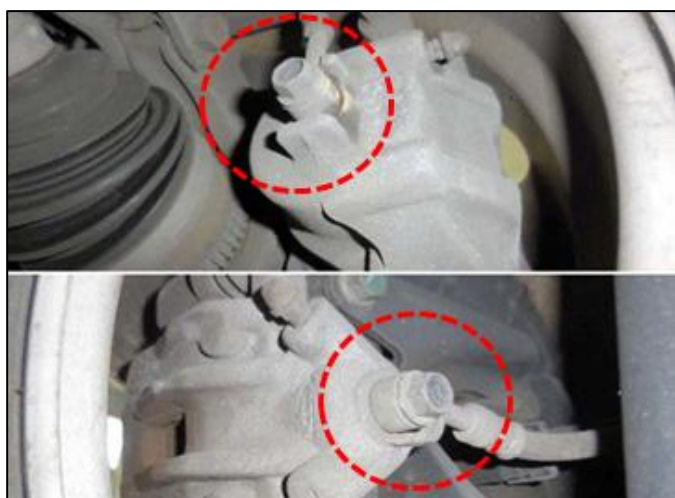
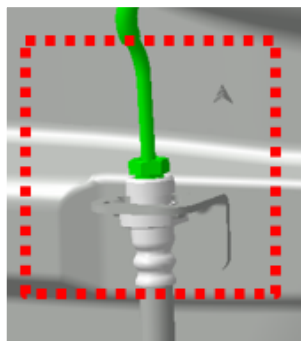
Rear Coupled Torsion Beam Axle (CTBA)



3. Use a wire brush to remove debris from the front sub-frame, left and right front lower control arms, and rear CTBA.



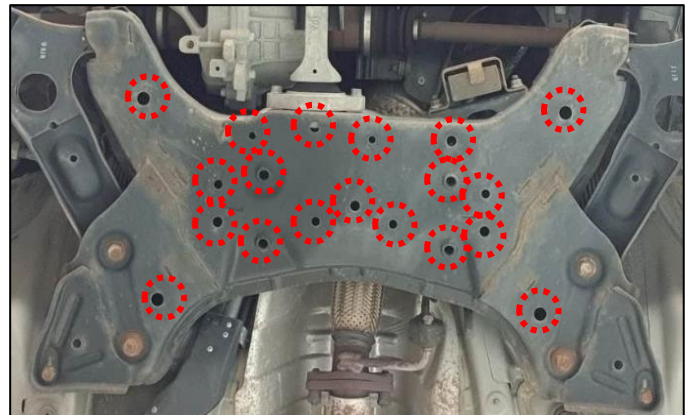
4. Use a wire brush to clean the brake banjo bolt surfaces at all four calipers and brake tube fasteners.



5. Remove debris by inserting an air nozzle into the interior cavity of the subframe, front lower arms, and rear CTBA, then blow air in multiple directions for a few seconds.

Use the marked areas as a guideline to insert the nozzle as shown in the photos below. Additional access might be possible to remove more debris.

Front sub-frame

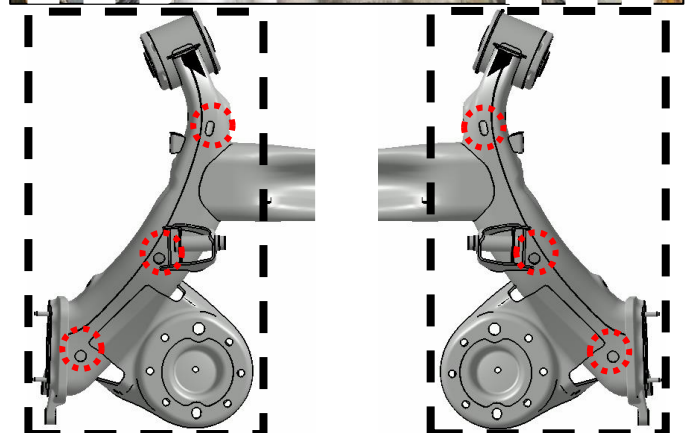


Left and right front lower control arms

There is no internal cavity in the front lower arms. Blow air on the exterior surface to remove remaining debris.



Rear CTBA



Vehicle Preparation:

1. Wrap the brakes with plastic bags to protect them from overspray. Use tape to secure the plastic in place. Leave the banjo fitting area exposed as shown.

CAUTION

- The brakes must be sufficiently cooled before it is wrapped.
- May cause burns and melt the plastic.



2. Wrap large plastic bags around the tires and wheels to protect them from overspray. Use tape to secure the plastic in place.



3. Wrap the exhaust areas adjacent to the front sub-frame and the rear Coupled Torsion Beam Axle (CTBA) with plastic bags to protect them from overspray. Use tape to secure the plastic in place.

CAUTION

- The exhaust must be sufficiently cooled before it is wrapped.
- May cause burns and melt the plastic.

Apply Cavity Wax:

! DANGER

- This procedure must be performed in a well-ventilated area.
- Must wear safety goggles, face protection, and gloves. Rinse eyes with water or skin with soap and water. Do not inhale spray. Seek medical attention if needed.
- Flammable & pressurized. Do not spray near flames, sparks, or heated areas. Do not pierce can.

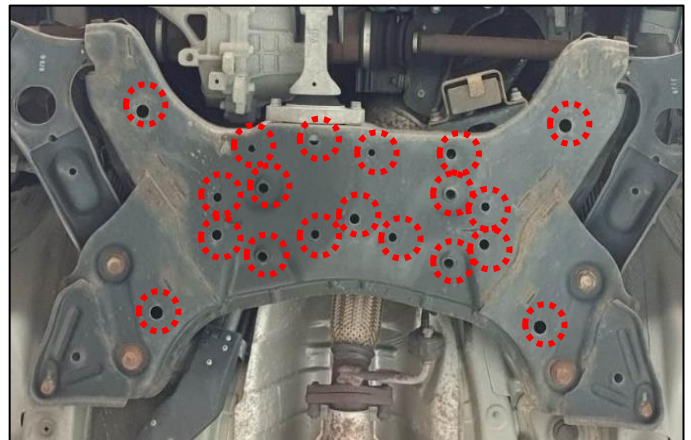
Apply the cavity wax at each of the locations noted in the following steps.

Generally for coating interior surfaces, insert the “inside” nozzle as deeply as possible at each point of entry. Spray the cavity wax while simultaneously rotating the nozzle and slowly pulling the nozzle out at a rate of about one second per inch. Continue this rotating/pulling motion until the pink tubing is seen coming out of the hole. The pink tubing indicates about 50 mm of tubing left until in the nozzle. Stop spraying when the pink tubing is seen.

Generally for coating exterior surfaces, use the “outside” nozzle and the wax gun. Use this nozzle if the inside nozzle is too large to access the internal cavity of the components.

1. Use the marked areas as a guideline to insert the cavity wax nozzle for each of the components. Additional access into the internal cavity of the components might be possible.

Front sub-frame

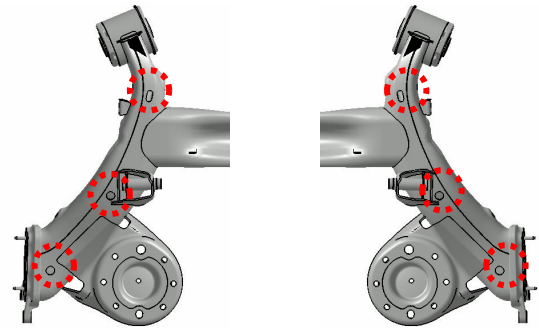


Left and right front lower control arms

Do **NOT** spray cavity wax on the front lower control arms. There is no internal cavity.



Rear CTBA



i Information

Wipe the excess wax off the exterior surfaces of the components.

Apply Undercoating:

! DANGER

- This procedure must be performed in a well-ventilated area.
- Must wear safety goggles, face protection, and gloves. Rinse eyes with water or skin with soap and water. Do not inhale spray. Seek medical attention if needed.
- Flammable & pressurized. Do not spray near flames, sparks, or heated areas. Do not pierce can.

1. Spray the black undercoating to coat the exterior surfaces of the listed components. Refer to the following images.

Front sub-frame



Left and right front lower control arms



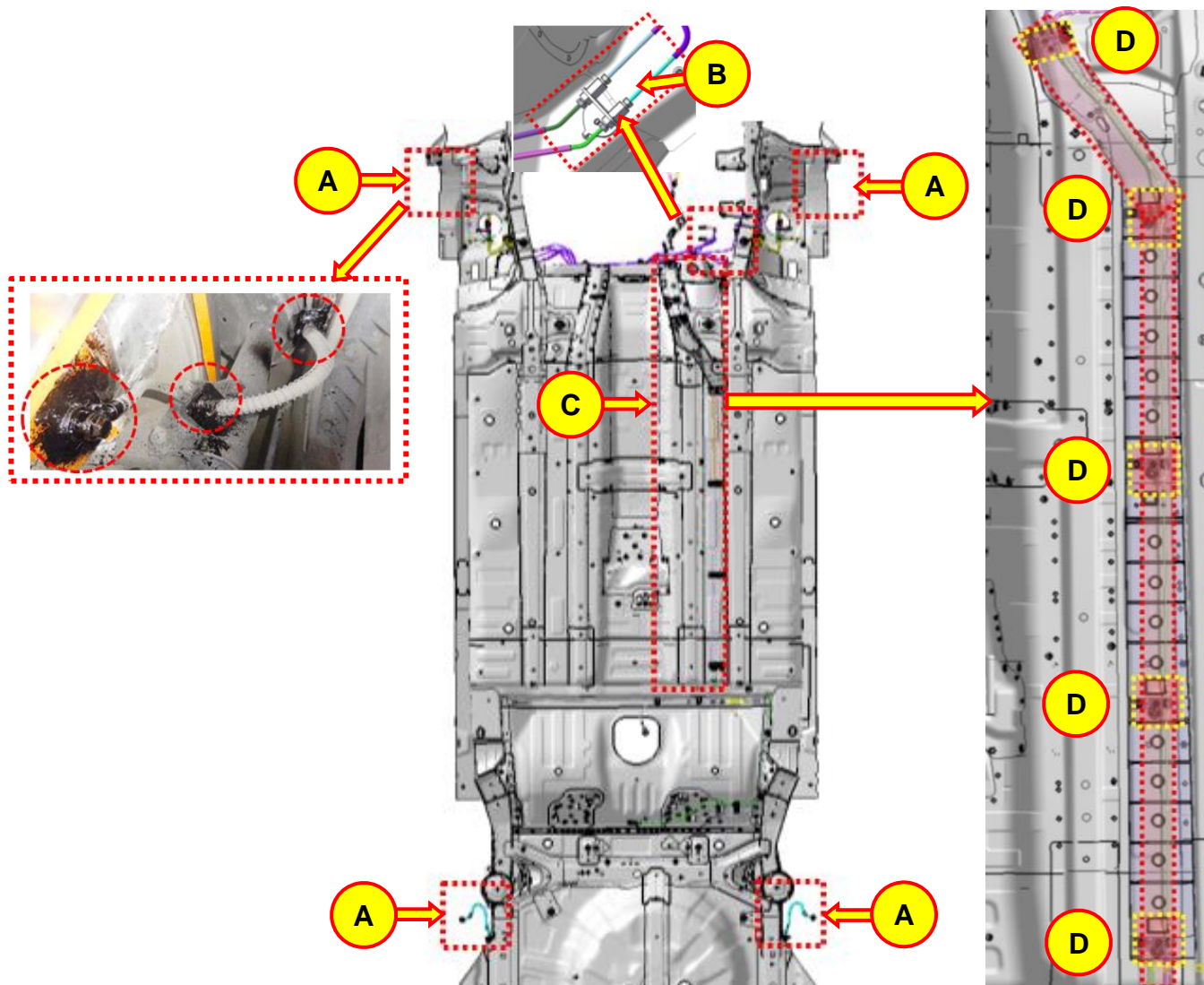
Rear CTBA

- Spray the undercoating on the **entire** rear CTBA. Photo shown to the right is for reference only.



2. Additional brake and fuel tube brackets and connectors:

- Banjo and brackets at each wheel position (A)
- Brake tube 2-way connector (B)
- Rear brake and fuel tubes within the area marked in (C)
- Areas marked in the boxes next to (D)



3. Remove all the plastic bags.

4.

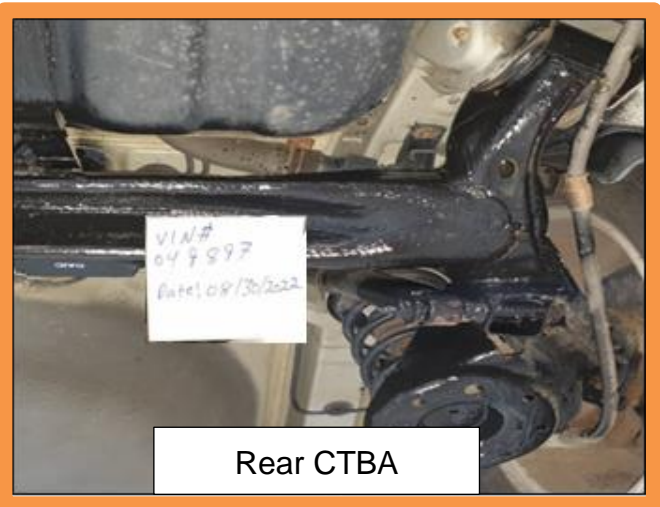
STUI



Using STUI, take clear photos of the following components after the undercoating is applied with the last 6 digits of the VIN and the date of repair on a piece of paper. See examples shown to the right.

1. Front sub-frame
2. Left front lower control arm
3. Right front lower control arm
4. Rear CTBA

Upload all four (4) photos to STUI.



5. Reinstall the parts in the reverse order of removal.
6. The procedure is now complete.