

ATTENTION:
 GENERAL MANAGER
 PARTS MANAGER
 CLAIMS PERSONNEL
 SERVICE MANAGER

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

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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: All MYs and All Models

NUMBER: 12-249-23R

SUBJECT: Cleaning of Painted Surfaces Affected by Pollen

DATE: 05/05/23

REVISED: 05/23/23

INTRODUCTION:

This bulletin announces the recommended cleaning procedures to followed when encountering vehicles with long time exposure to pollen on painted surfaces. During the lengthy vehicle shipping process, pollen and rain can sit on the paint for an extended period of time. This combined with high temperatures from shipping containers can cause a fatty acid in the pollen to melt into the paint and also cause swelling of the paint. As a result, the pigment from the pollen can seep into the paint and cause discoloration and swelling. However, this type of pollen exposure will not harm plastic, rubber, or glass surfaces and can be easily cleaned from them.

EXAMPLE OF CONCERN:



**Discoloration / Swelling
 Caused by pollen adhesion**

CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.
 Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

Subaru of America, Inc. is ISO 14001 Compliant
 ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

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REQUIRED MATERIALS/TOOLS:

Equipment	Purpose	Details
High temperature steamer	Maintain temperature	Do not rub and/or press the painted surface
Heat gun (Depends on steamer spec)	Maintain temperature	Do not raise the temperature above 212 °F
Thermometer	Monitor temperature	Constant temperature monitoring
White cotton towel	Protect painted surface	Wraps around the tip of the steamer
Microfiber Towel	Wipe off excess water after treatment	Must be white in color
Machine Polisher	Application of Compound	To be used by experienced personnel
Ultra-Fine Compound Polish	Used with light remaining discoloration	Ultra-Fine Compound is effective in most cases
Compound Polish	Used when remaining discoloration is very visible	Compound Polish should be used only when Ultra-Fine is not effective
Automotive Paint Shampoo	Used for washing	Always refer to shampoo manufacturer's instructions

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EXAMPLES:

- **Steam Cleaner:** [Central Machinery 1500 Watt Steam Cleaner Kit](#) is shown in the example image to the right.

NOTE: Additional cloths (p.n. 600078) can be purchased separately if needed, however these must never be used directly on painted surface.



CAUTIONS:

- Always add “white” paint safe cotton cloth over or in place of the supplied surface cleaning pad to prevent paint damage.
 - Since steamer temperatures can vary widely and some exceed 250°F, always confirm the output temperature of the steamer and adjust positioning or number of cloths used to avoid damage to plastic or painted surfaces.
 - When removing pollen from the mirrors, hood ducts, hood decals, roof rails, front grilles, and spoilers it is important to limit the temperature to 158°F (70°C) in order to avoid any damage.
- **Microfiber Cleaning Cloths:** MUST be White in color when used for steaming operation. Other colors are acceptable for washing or drying.

NOTE: It is important to confirm equivalent microfiber towels used are at least 200 grams per square meter (gsm,) with the best quality, professional grade towels weighing in around 400 gsm.



- **Variable Temperature Heat Gun:** [Snap-On Tool SNT25596](#) is shown in the example image to the right.

NOTE: Applying heat with a heat gun is one of the methods used in place of steam cleaners when a steam cleaner is not available, or the affected area is very small. SOA recommends the use of steam cleaners when available.



- **Infrared Laser Thermometer:** [Blue-Point Tool RTEMPB3A](#) is shown in the example image to the right.



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- **Machine Polisher:** Refer to polish manufacturer instructions for appropriate application equipment and pad type. Machine polishers should only be used by trained and experienced personnel.

- **Compound Polish(1~15µm):** [Mequiar's Ultimate Compound G17216](#) is shown in the example image to the right.



- **Ultra-Fine Compound Polish (~1µm):** [3M™ Perfect-it™ EX Machine Polish](#) is shown in the example image to the right.



- **Automotive Paint Car Shampoo:** [Swift Auto Care Touchless Car Shampoo](#) is shown in the example image to the right. Always refer to the product manufacturer's instructions when applying these products to painted surfaces.



SERVICE PROCEDURE / INFORMATION:

STEP 1: Rinse the vehicle thoroughly to remove loose materials from the painted surfaces. Thoroughly wash the vehicle using a paint safe microfiber cloth or wash mitt along with an automotive specific neutral soap to remove the pollen adhered to the paint. Use plenty of water and keep washing surfaces wet. Turn or change the mitt/cloth frequently to avoid scratching the paint. The use of warm water is recommended to help loosen the pollen. Once the affected area is washed and dried, inspect for any remaining signs of discoloration **and swelling**.

NOTE: Initial vehicle wash time is included in standard retailer prep operations.

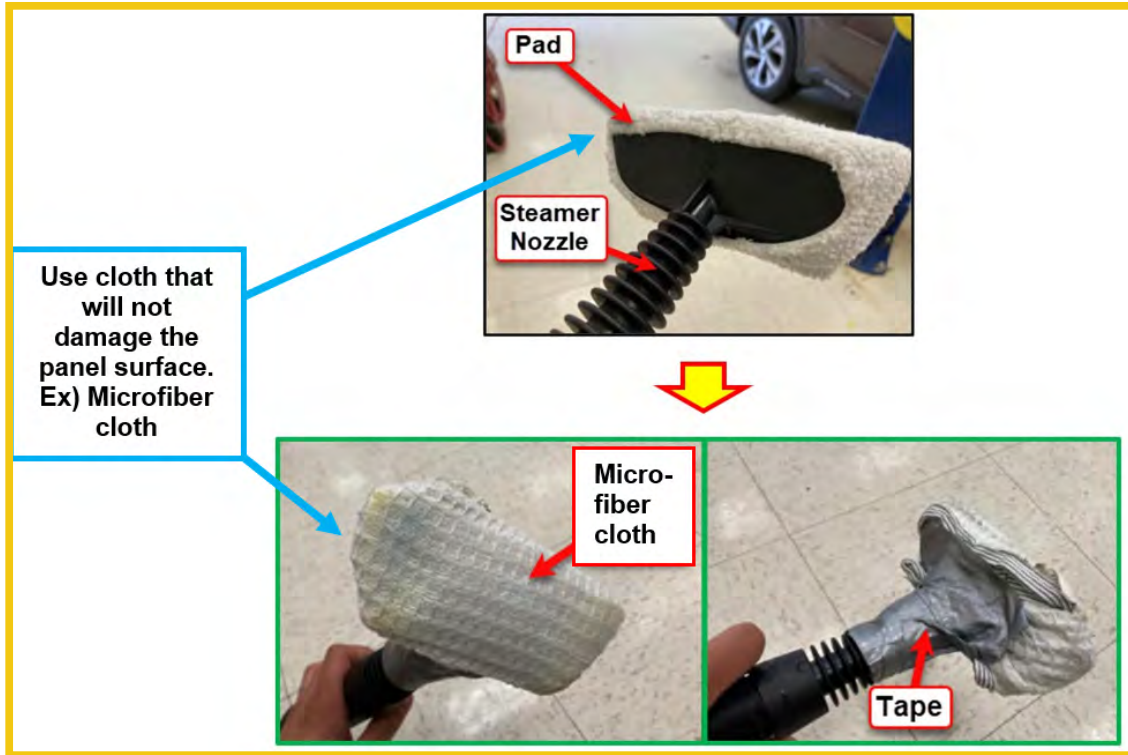
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Are signs of discoloration and swelling detected?

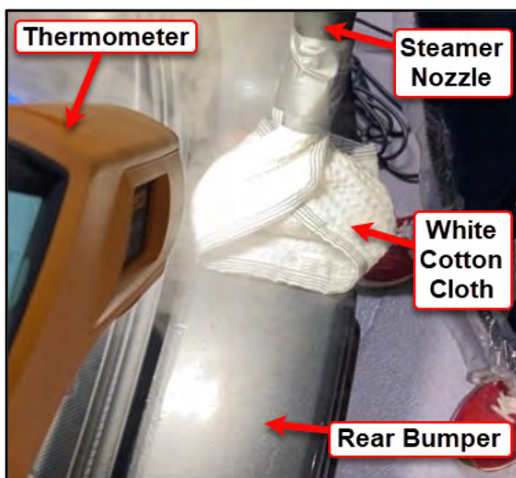
YES: Proceed to the next Step

NO: The vehicle is not affected. Continue performing the Pre-Delivery Inspection.

STEP 2: Prepare the end of a steam cleaner by taping a white microfiber cloth over the pad portion of the nozzle. Rest the towel on the surface to be treated. Do not agitate it on the surface as this may cause paint damage.



STEP 3: CAREFULLY apply steam to the affected area evenly for three minutes. A timer can be used to ensure the proper time frame. Using an infrared laser thermometer, monitor the temperature of the painted surface. The recommended temperature is 176°F (80°C) to 194°F. **NEVER** exceed 212°F. Allow the affected area to cool, dry and inspect the surface. Repeat this process up to **THREE** times if discoloration and swelling is still detected.



IMPORTANT CAUTIONS:

ONLY apply heat to the affected area with the steamer. **DO NOT** rub or apply pressure to the affected area with the steamer. Any aggressive agitation may cause damage to the painted surface.

Avoid applying heat exceeding 212°F (100°C) to any plastic components such as bumpers.

When applying heat to the mirrors, hood ducts, hood decals, roof rails, front grilles, and spoilers it is important to limit the temperature to 158°F (70°C) in order to avoid any damage.

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After three intervals of applying heat for three minutes, wipe off any excess water with a microfiber cloth and inspect for any signs of discoloration and swelling.

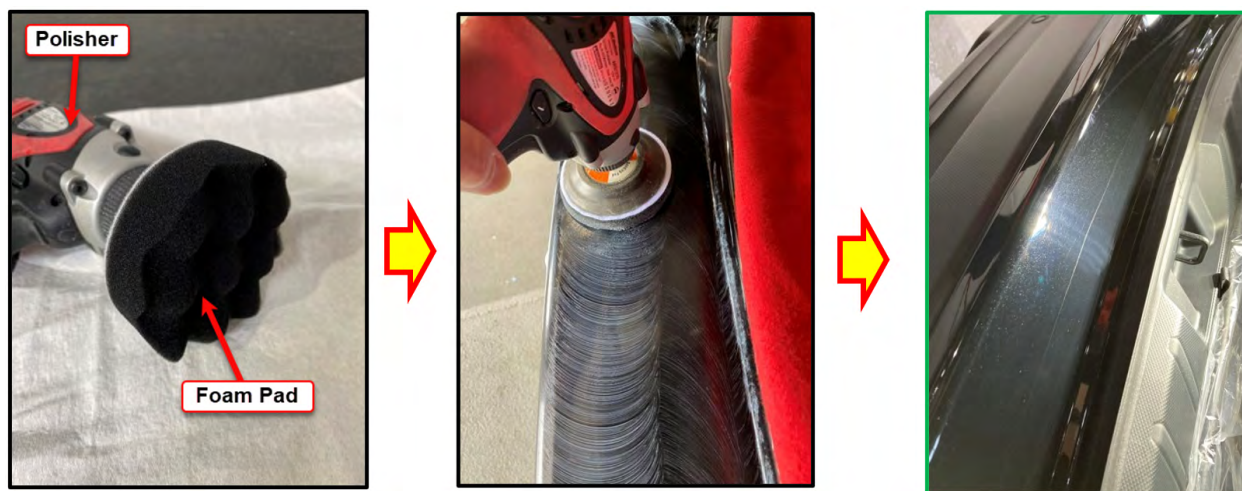
Are signs of discoloration and swelling detected?

YES: Proceed to the next Step

NO: The procedure is COMPLETE

STEP 4: CONFIRM the affected area is at room temperature (around 68°F). Use an infrared laser thermometer to measure the temperature. If the paint is polished under high temperature conditions, when it returns to room temperature, the paint film will shrink, staining may remain. Polish the areas of any signs of discoloration and swelling using an ultra-fine (~1µm) compound polish and a foam pad. **DO NOT** apply excessive pressure to the polisher. See example of recommended product listed earlier in this bulletin.

NOTE: When applying polish either by hand or machine, always follow the product manufacturers application instructions. These instructions are updated on a continuous basis and generally include specifics on materials and tools necessary to achieve the desired results. Contact your local paint and chemical supplier/distributor for the product manufacturer to request the most up to date application information before attempting any polishing or buffing.



Clean the area using a microfiber cloth and inspect for any signs of discoloration and swelling.

Are signs of discoloration and swelling detected?

NO: The procedure is COMPLETE

YES: Repeat this process using a polishing compound with a slightly coarser grit (1~15µm). See example of recommended materials listed earlier in this bulletin.

IMPORTANT: If the discoloration and/or yellowing cannot be removed by the above procedures, repainting may be required.

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WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Adjustment Warranty period, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Labor Time	Fail Code
POLLEN STAIN REMOVAL**	B971-028	0.4	XKZ-62
EACH ADDITIONAL PANEL, STAIN REMOVAL*	C971-025	0.2	XKZ-62
ONE PANEL, POLISH*	C971-021	0.3	XKZ-62
EACH ADDITIONAL PANEL, POLISH*	C971-015	0.3	XKZ-62

* These operations can be duplicated on the claim per the affected panel.

** Includes work bay setup and steam cleaner attachment preparations.

NOTE: Up to \$3.00 dollars can be claimed in sublet for polish/compound used.

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.