



00-19-01 - PDI - Paint Defect - Water Migration Under the RAPGARD® Release date: 1/30/2023

Condition

Applicable Vehicles					
Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
All Models	2020-2023	All	All	All	All

Revision Table			
Instance Number	Published Date	Version Number	Reason For Update
2040590/11	1/23/2023	00-19-01	To update model year applicability.
2040590/10	1/5/2022	00-19-01	To include additional model year applicability.
2040590/7	6/29/2020	00-19-01	To include additional model year applicability.
2040590/6	9/17/2019	00-19-01	To include additional photos of water migration.
2040590/1	6/5/2015	V001503	Original publication.

Note:

Water migration under the RAPGARD® can be mistaken as a paint defect when in fact it is only moisture trapped in the clear coat of the paint. See Examples 1-12 to see how water migration may appear.

Technical Background

When RAPGARD® is applied at the factory, humidity in the air can get trapped between the plastic and the paint. Over time this moisture can be absorbed into the clear coat creating marks.

Production Solution

Not Applicable.



Service

Topics Covered

- RAPGARD®, removal and disposal
- Inspecting for water migration in areas where RAPGARD® was removed.
- Examples of water migration after the RAPGARD® is removed

RAPGARD®

Vehicles are shipped with RAPGARD®. This self-adhering plastic product is applied in certain areas of the vehicle and is designed to provide protection from all types of possible damages.

RAPGARD®, Removal



Note:

RAPGARD® must be removed from the vehicle no later than nine months after application. See sticker (location on vehicle body varies) for detailed information.

Vehicle must be at room temperature.

The ideal body surface temperature for RAPGARD® removal is 60°F (15.5°C) to 80°F (26.6° C).

If body surface temperatures are below 60°F (15.5°C) or above 80°F (26.6° C) then:

- Removal procedure should be performed indoors after surface temperatures have been allowed to stabilize within the given range.
- Rinse vehicle thoroughly with water to remove surface dirt or dust and to help stabilize body surface temperatures.
- Starting at the corners of each panel, carefully remove RAPGARD® from vehicle.

RAPGARD® Disposal

RAPGARD® can be disposed as normal paper waste. If unsure about proper disposal procedures in your area, check local regulations.

RAPGARD®, Paint Inspection after Removal

Inspect painted surfaces under one of the following lighting conditions:

- Indoors under fluorescent lighting.
- Outdoors under bright sunlight.

Inspecting for Water Migration

After removal of RAPGARD®, some vehicles may exhibit temporary paint discoloration or paint swelling (caused by trapped moisture under the RAPGARD®).

- This temporary swelling is caused by the paint finish absorbing moisture trapped under the RAPGARD® film.



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- This swelling will disappear with exposure to the sun or heat lamps within 2 -3 hours. Severe paint swelling may require 2 -3 days to recover.



Note:

DO NOT buff or refinish paint for this condition!

Paint discoloration (looks like shaded or dark magic marker lines) can be removed with a heat gun using the following procedure:

- Hold heat gun approximately 3 in. away from affected paint surfaces and apply heat using slow oscillating motions until discoloration is gone.
- If discoloration remains, wipe the heated area with Isopropyl alcohol and repeat procedure to increase surface drying.

Various Examples of Water Migration under the RAPGARD®



Example 1



Example 2



Example 3



Example 4



Example 5



Example 6



Example 7



Example 8



Example 9



Example 10



Example 11



Example 12

Warranty

Information only.

Required Parts and Tools

No Special Parts required.

No Special Tools required.

Additional Information

All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check with your Parts Dept. and Repair Manuals for the latest information.