



Technical Bulletin

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
All Except Routan	1998 - 2016	All	All	All	All

Condition

92 15 02 July 22, 2015 **2026253** Supersedes T. B. V921301 dated May 6, 2012 to provide updated cleaning product information and include additional model and model year applicability.

Windshield Wipers Streak or Smear

Windshield or rear window is streaked, has a snakeskin appearance, or the surface feels rough.

To avoid unnecessary replacement of wiper blades, the condition and cleanliness of the windshield, rear window and wiper blades, should be checked first.

Customer complaints may include that the wipers:

- Streak or smear.
- Do not clear across entire length of blade.
- Chatter (Noisy) or skip as wiper travels across the windshield or rear window glass.

Technical Background

By cleaning the windshield and rear window glass the wiper performance is significantly improved, as is the longevity of the wiper blades.

The following are possible causes that can affect the operation of the windshield wipers:

- Dirt and grime accumulation on the windshield or rear window glass.
- Residues from cleaning products and industrial fallout.
- Remnants of high gloss drying aid on glass surfaces.
- Use of Nano coating (found in some special application washer fluids) on the windshield or rear window glass.
- The wiper arm or blade is damaged or the rubber section of the blade is worn.

Production Solution

No production change required.

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Service

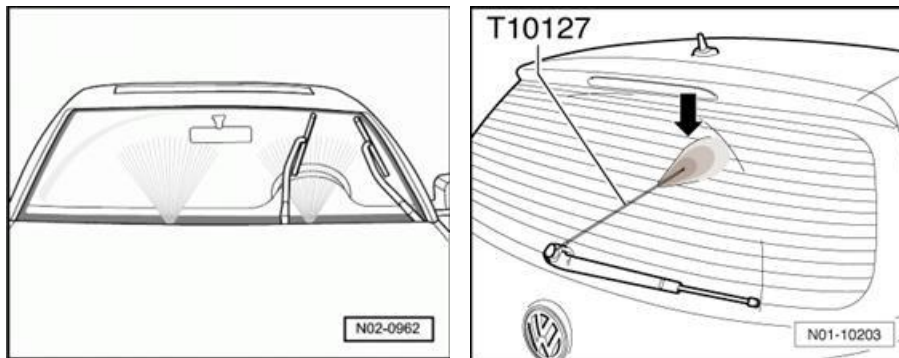
BEFORE REPLACING THE WIPER BLADES:

Check Wiper and Washer Operation

- Verify operation of windshield and rear window washer(s).

 **Note:**

DO NOT attempt to wipe or clean windshield wiper edge with cleaning cloth or chemicals. Wiper(s) are manufactured with treated surface that requires no maintenance.



- If the washer(s) need to be adjusted, see Repair Manual Group 92 Windshield Wiper/Washer System in ElsaPro.
- Verify when in operation and after correct adjustment of washer(s) that wipers do not streak and properly clear the windshield.
- To clean the windshield or rear glass, proceed with the following steps:
 1. Check for foreign matters that need to be cleaned or removed from the glass or wiper(s).
 2. Clean the glass using 3M™ Quick Wax and Perfect-It Clay. See the steps outlined below.

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Exterior Glass Cleaning



With vehicle exterior (including all glass surfaces) washed and dried and the wiper arms placed in the service position, perform the following:

- Apply 3M™ Quick Wax Part No. 39034 to the windshield or rear glass.



Using 1/3 of a bar 3M™ Perfect-It™ III Cleaner Clay Part No. 38070:

- Flatten clay into a small palm size pancake.
- With clay flat between windshield and your hand, rub windshield (with light friction) using a vertical motion (up/down) across windshield.

 **Tip:**

Ensure glass stays moist with Quick Wax. Clay can be flipped over when dirty.

Wipe dry with a clean lint free towel.

 **Tip:**

It may be necessary to apply a small amount of Quick Wax to the glass again when wiping dry.

Inspect glass surface using the palm of your hand (feel for rough surface).

If rough surface is found:

- Repeat process until clean.

 **Tip:**

The Cleaner Clay can be reused several times by kneading clay, however; 3M™ Perfect-It™ III Cleaner Clay should not be used on painted surfaces after use on glass surface.



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Waxes, particularly those applied by car washes, industrial fallout, and various other sources, may leave residue on the windshield or rear window wiper(s) that affects wiping efficiency.

If after cleaning the windshield or rear window glass and inspecting wiper components, the wiper blades still streak or smear or is noisy, replace the windshield wipers or rear window wiper.

Additional Information

Nano coating

- Nano coating prevents moisture from covering the windshield with an even amount of water, which can lead to streaking / chattering.
- Once applied, the Nano coatings cannot be fully removed. The residues of the Nano coating can leave marks and/or residue on the windshield. These residues can impair the driver's vision.

Note:

Windshield or rear window glass with marks or streaks caused by residue of Nano coating cannot be claimed under New Vehicle Limited Warranty component replacement, and the claim will be rejected.

Wiper blades worn

- When working on wipers or rubber sections observe the repair manual.
- Do not adjust Aero wiper blades.

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.