




CARDINAL IG Procedure

TITLE <i>Glass Cleaning Procedure for non-Coated Glass Surfaces</i>	REVISION C
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REVISION HISTORY

REV	C.O.	DESCRIPTION	Implementation Date
A	LAB 074	Original Release.	1/21/2011
B	LAB 078	Paragraph two; adding recommendation to not use metal scrapers, razor blades or steel wool on glass	11/28/2011
C	LAB 081	Changed i81 to i89 and addressing cleaning residues from adhesives	11/30/2012

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Glass Cleaning Procedure for non-Coated Glass Surfaces

Caution: This cleaning procedure is not acceptable for use with #1 or #4 surface coatings. Abrasive cleaners are not to be used with exposed surface coatings such as NEAT® or i89™.

The following is the accepted glass cleaning procedure for removal of **stubborn surface contaminants** on glass surfaces when typical household glass cleaners do not work. The cleaning materials below should only be used if typical household cleaners (Windex, IPA/water) have not removed the residue/dirt/stain. **Cardinal does not recommend the use of metal scrapers, razor blades, or steel wool, as these materials are known to cause scratches on glass.**

The residue from certain adhesives including those from masking films (including Preserve®), tapes and labels may not be easily removed with the abrasive cleaners described in this document. Cleaning using the recommendations of Document 5025 *Glass Cleaning Procedures for Exposed Surface Coatings* is suggested.

ACCEPTABLE CLEANING MATERIALS FOR STUBBORN RESIDUE:

- Cerium Oxide (comes in a powder form, mix into a paste with water, roughly 1 to 1 by volume). Available through Minnesota Lapidary Supply Corporation (612-872-7211) or local glass shop.
- Soft Scrub non-bleach cleaner.
- Crest Toothpaste (white paste not gel).
- Mr. Clean Magic Eraser Pads.
- 3M **Light** Duty Scouring Pads.
- Bar Keepers Friend.

CLEANING PROCESS:

1. Initially spray the glass with the standard cleaning solution such as Windex, vinegar/water, isopropyl alcohol/water or Rain-X Glass Cleaner.
2. Wipe dry using paper towel. If possible use the Sellars® shop paper towel available in the automotive departments at Target, or at the local hardware store. Unlike common paper towels, these towels do not leave a residue on the glass.
3. All of the cleaners listed above have a light abrasive which will mechanically remove the stubborn residue from the glass, without scratching the glass.
4. Spread the light abrasive cleaner onto a moist paper towel, and apply to the glass. Rub in a circular motion over the area with the stubborn stain. It works best to clean a 2 foot x 2 foot area at a time. Depending on the stubbornness of the residue, more than one application of the mild abrasive cleaner maybe required. After cleaning with the mild abrasive cleaner, wipe the area with tap water. It may take additional cleaning with water to remove the residue left from the mild abrasive cleaner.
5. Do a final cleaning with soap and water.

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