



2007

**MANUFACTURER'S
CLEANING AND MAINTENANCE
SPECIFICATION**

**COMMERCIAL AVIATION
UPHOLSTERY LEATHER**



TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page(s)</u>
I	PURPOSE	1
II	LIST OF RESTRICTED CHEMICALS	2
III	RECOMMENDATIONS REGARDING CLEANING SOLUTIONS	3
IV	INSTRUCTION FOR INSPECTION OF COVERS	4
V	INSTRUCTIONS FOR CLEANING COVERS – ON AIRCRAFT	5
VI	RECOMMENDED CLEANING INTERVALS	6
VII	LEATHER DRESS COVER STORAGE	7
VIII	INFORMATION FOR CONSULTATION	8



SECTION I

1.0 Purpose

- 1.1 Proper care of leather, including cleaning and maintenance, is imperative to the long life of a dress cover. Several commercial airlines (internal or contracted cleaning crews) are unknowingly using a multitude of damaging chemicals on or around their seats / seat covers. This specification is to serve as a guideline to assist in the care and maintenance of commercial aviation leather dress covers.

SECTION II

2.0 List of Restricted Chemicals

- 2.1 Some chemical groups can melt into the finish system and/or cause damage leading to tacky feeling leather and / or color transfer:
- 2.1.1 Solvents or petroleum based solvents such as acetone, methyl ethyl keytone (MEK), mineral spirits, and lacquer thinner and isopropyl alcohol.
 - 2.1.2 Organic solvent groups, such as, esters, ethers, keytones, amines and nitrated and chlorinated hydrocarbons.
 - 2.1.3 High alkaline cleaners (pH of 9 or more) or acid based products (pH of 5 or less) such as most heavy-duty degreasers, products containing bleach, ammoniated cleaners, d'limonene based products, bathroom cleaners containing acids, terpinolene or most parts washer fluids.
 - 2.1.4 Dry Cleaning and Steam Cleaning can do the following to your finish system:
 - a) Premature cracking
 - b) Change the "hand" or feel of your leather
 - c) Discoloration
 - d) Adverse effects on flammability
 - e) Delamination

"Oil" type soaps that can leave behind tacky residue causing increased staining, chemical build-up and soil adherence. These types can also harm finish of dress cover if left on leather.



SECTION III

3.0 Recommendations for Care

- 3.1 Always pretest your products in a hidden and unhidden area before widespread use.

- 3.2 Use Perrone's Deep Cleaner (#DC – 232 or #DC – 132) to remove soil build-up on leather dress covers. Spray liberal amount of product (approx. 2 oz. per Tourist Class dress cover) on clean, lint-free rag or cloth and wipe down covers, panel by panel. Remove any excess build-up of chemical on dress cover. For heavier soiled areas, a horsehair brush may be required. Apply product to bristles of brush and gently agitate leather in a circular motion until soil is removed. DO NOT spray Deep Cleaner or other products directly on leather. Allow leather to air dry prior to using Perrone's Leather Conditioner.

- 3.3 Dispense Perrone Leather Conditioner (#CN-116) (approx. 2 oz. per Tourist Class dress cover) onto clean, lint-free rag or cloth and wipe down covers, panel by panel. Lightly remove any excess build-up of chemical on dress cover. Allow to air dry.

Note

- 3.4 If you are unsure of the products currently being used, Perrone will be happy to test them for you. Submit samples of your current formula(s) with MSDS to Perrone's QC department.



SECTION IV

4.0 Instruction for Inspection of Covers

- 4.1 Common stains and / or damage include:
 - 4.1.1 Ink stains
 - 4.1.2 Discolorations
 - 4.1.3 Differences in gloss of protective clear top
 - 4.1.4 Gum
 - 4.1.5 Rub-through on corners (especially isle seating)
 - 4.1.6 High gloss shine caused by a build-up of body oils
 - 4.1.7 Dirt build-up

Inspection of leather dress covers “on aircraft” should be performed on a regular basis by cleaning or maintenance staff during regular cleaning of the aircraft.



SECTION V

5.0 Instruction for Cleaning Covers – ON AIRCRAFT

- 5.1 As some surfaces are inherently sensitive to cleaning products, always pre-test your products on both a hidden, and unhidden area before widespread use on leather.
- 5.2 Apply liberal amount of cleaning solution (approx. 2 oz per PAX) to a lint-free rag, towel, horsehair brush or cloth. Wipe seat with saturated towel until soil is removed. Do not spray product directly on the leather. Wipe excess cleaning solution and soil off with clean rag, towel or cloth.
- 5.3 Use all products in a manner that is consistent with product specification sheets and product packaging.

Important Note

- 5.4 **USE PERRONE LEATHER CLEANING AND CONDITIONING PRODUCTS ON FINISHED LEATHER SURFACES ONLY. IT IS NOT RECOMMENDED TO USE CLEANING SOLUTIONS OR CONDITIONERS ON UNFINISHED LEATHER PRODUCTS SUCH AS NAKED, SUEDE OR NUBUCK LEATHERS.**

If your current cleaning work instruction differs from this specification, you may submit a copy of your work instruction to Perrone for review and consultation.



SECTION VI

6.0 Recommended Cleaning Intervals

6.1 On Aircraft

6.1.1 It is recommended for you to clean and condition your commercial dress covers (1) time per month, every 200-flight hours or more often if heavy use as soiling and general conditions dictate.

6.2 Off Aircraft

6.2.1 It is recommended that when your seat and/or seat covers are removed from aircraft that they are thoroughly inspected, cleaned and conditioned. Perrone recommends that your internal cleaning do this, maintenance staff, or an outside contractor that also offers repair options.



SECTION VII

7.0 Leather Dress Cover Storage

- 7.1 The ideal environmental condition for storing leather is 70 degrees F at 50% relative humidity. Avoid temperatures less than 32 degrees F and above 85 degrees F. Hot and/or humid temperatures can affect the integrity of leather and possibly cause mold and mildew.
- 7.2 Do not store leather in cartons or plastic. The ideal way to store leather in hide form is on a horse, with finished sides facing each other. For leather that is in cut or assembled part form, do not stack or fold. We recommend single racks for storage of these parts.
- 7.3 Avoid exposing leather to direct sunlight and air containing reactive chemical fumes.
- 7.4 For specific questions regarding the storage of leather, contact Perrone Leather at (800) 871-5847.



SECTION VIII

8.0 Information for Consultation

- 8.1 For additional information about the cleaning, maintenance or restoration of your commercial dress covers, contact:

Perrone Leather
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