



SURFACE VEHICLE STANDARD

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Standard of Purity for Use in Mobile Air-Conditioning Systems

RATIONALE

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Foreword—Due to the CFC's damaging effect on the ozone layer, recovery/recycling of CFC-12 (R-12) used in mobile air-conditioning (A/C) systems is required to minimize system venting during normal service operations. Establishing recycle specifications for CFC-12 (R-12) assures that system operation with recycled CFC-12 (R-12) will provide the same level of performance as new refrigerant. Refrigerant that has been "reclaimed" must meet the appropriate ARI 700 purity specifications and must be processed by an off-site certified refrigerant reclaimer. Refrigerant that is "recycled" on-site for direct reuse must meet the purity specifications as identified in Section 3 which is less stringent than the ARI 700 requirements.

Extensive field testing with the EPA and the auto industry indicate that reuse of CFC-12 (R-12) removed from mobile A/C systems can be accepted, if the refrigerant is cleaned to a specific "recycled" standard. The purpose of this standard is to establish the specific minimum levels of CFC-12 (R-12) purity required for recycled R-12 removed from automotive A/C systems.

1. Scope—This information applies to refrigerant used to service automobiles, light trucks, and other vehicles with similar CFC-12 (R-12) systems. Systems used on mobile vehicles for refrigerated cargo that have hermetically sealed, rigid pipe, are not covered in this document.

2. References

2.1 Applicable Publications—The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J1989—Recommended Service Procedure for the Containment of CFC-12 (R-12)

SAE J1990—Extraction and Recycle Equipment for Mobile Automotive Air-Conditioning Systems

2.1.2 ARI PUBLICATION—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ARI 700 Refrigerant Standard