

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.74

National Policy

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6/5/09

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6/5/10

SUBJ: Parts Marking

1. Purpose of This Notice. This notice provides guidance to aviation safety inspectors (ASI) (maintenance and avionics) for advising operators and maintenance providers on the marking of in-service articles.

2. Audience. The primary audience for this notice is Flight Standards District Office (FSDO) ASIs (maintenance and avionics) who have certificate management oversight responsibilities. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters.

3. Where You Can Find This Notice. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Air operators and the public can find this information on the Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov/>.

4. Background. Title 14 of the Code of Federal Regulations (14 CFR) provides limited requirements for marking certain parts and products. These requirements are generally contained in parts 21 and 45 and apply only to the production approval holder (PAH) at the time of production. Parts that are not required to be marked during production may also have identification information on identification plates, tags, labels, or on the actual part itself. The PAH or its suppliers may apply such markings.

a. Missing or Illegible Information. During the normal course of operations and maintenance, some or all of this information may be missing or become illegible. In other cases, the person maintaining the part may have added or changed marking information.

b. Inconsistent Information. The FAA has provided inconsistent information to maintenance providers about part marking requirements associated with these in-service articles.

5. Regulations, Legal Rulings, and Guidance.

a. Regulations. With the exception of part 45, § 45.13(b) through (e), which apply only to the removal, installation, changing, or placement of identification information for aircraft, aircraft engines, propellers, propellers hubs, and propeller blades, there are no regulations (other than life-limited parts) that deal directly with part marking of in-service articles during

maintenance or alteration of articles. Therefore, this issue must be evaluated in light of general airworthiness principles.

b. Minor Deviations. While identification data for a component may be part of the aircraft's type design, the fact that it may be missing or illegible does not mean that the aircraft is not airworthy when the article is continued in service or installed. National Transportation Safety Board (NTSB) case law and FAA legal interpretations have concluded that not every minor deviation (e.g., dents, scratches, pinholes of corrosion, or missing screws), no matter how minor or where located on the aircraft, dictates the conclusion that the aircraft's design, construction, or performance has been impaired by the defect to a degree that the aircraft no longer conforms to its type certificate (TC).

c. Form 8130-3. Existing FAA guidance for evaluating parts (e.g., Advisory Circular (AC) 20-154, Guide for Developing a Receiving Inspection System for Aircraft Parts and Material) recognizes that part markings are only one of many factors that an inspector may use to establish the airworthiness of parts for installation on TC products. The current edition of Order 8130.21, Procedures for Completion and Use of the Authorized Release Certificate, FAA Form 8130-3, Airworthiness Approval Tag, states that the PAH may use a Form 8130-3 as a substitute means of identifying parts when the information is no longer visible on the part itself.

d. Other Methods of Determining Airworthiness. This practical approach to airworthiness means that conformity to type design of in-service aircraft and other articles is evaluated under part 43 and/or the maintenance and inspection portions of the applicable operating rules. The operator or maintenance provider must employ other suitable methods for determining airworthiness if the identification information is missing or illegible. Indeed, this is true regardless of whether the parts were required to be "permanently" marked at the time of manufacture.

e. Consistently Missing Markings. In accordance with part 21, § 21.607(d) and § 45.15, Technical Standard Order Authorization (TSOA) and Parts Manufacturer Approval (PMA) articles are required to be permanently and legibly marked, so part markings should not be routinely "missing." ASIs who become aware of specific TSOA or PMA articles that consistently have missing markings should forward that information to the Production Approval Holder's (PAH) Manufacturing Inspection District Office (MIDO) and copy the Aircraft Engineering Division (AIR-100). This information can help the PAH's MIDO resolve any deficiencies in either the TSO/PMA standard or the TSOA/PMA holder's design or manufacturing processes for part marking permanency.

6. Guidance.

a. Operations and Maintenance. The following guidance for ASIs concerns the absence of identification data on a part (including but not limited to PMA and TSOA articles) and the subsequent re-marking of these components.

(1) Part marking is not essential for determining the continued airworthiness of an in-service article, provided the operator and/or its maintenance provider can determine that it conforms to its approved design and is in condition for safe operation.

(2) Except for § 45.13(b) through (e), there are no regulations (other than life-limited parts) requiring or prohibiting re-marking of a part received with a missing or illegible identification plate, label, tag, or other identifying marks.

(3) Except for § 45.13(b) through (e), there are no regulations (other than life-limited parts) requiring or prohibiting a person performing maintenance on the part from adding identification information.

b. Other Methods for Determining Airworthiness/Continuity of Original Markings.

(1) When identification data is no longer visible, the operator or maintenance provider will need to determine that the part was produced in accordance with part 21, and may need to investigate further to determine the article's identity and airworthiness. Frequently, they can establish airworthiness by other means, including but not limited to:

- Visual and other kinds of inspections,
- Operational or functional checks,
- Reference to an Illustrated Parts Catalog (IPC) and/or Component Maintenance Manual (CMM), or
- Knowledge that the article received an appropriate incoming inspection and remains within the control of the same operator or maintenance provider.

(2) For example, an air carrier may employ a procedure for determining that an in-service article is in an airworthy condition even though the identification data required at the time of manufacture is no longer visible. In such cases, the operator could continue the aircraft in service with the article installed until it can re-apply the identification data, such as during a scheduled check. When an air carrier or maintenance provider re-identifies a part, it must determine that the replacement information is consistent with the original marking. For example, engine parts have the same configuration but different part numbers due to different materials.

c. Removal and Replacement of Information. Even if not prohibited by § 45.13(b) through (e), it is generally inadvisable to remove original identification even if it is illegible. Instead, add additional information as is further described below.

7. Action. For questions concerning replacing identification information on parts not covered by § 45.13(b) through (e), the ASI should provide the following advice:

a. Air Carriers.

(1) If an air carrier is continuing in service or maintaining the part, the individual performing the maintenance must follow the operator's maintenance program and the applicable sections of its manual.

(2) Encourage air carriers to query design and production approval holders regarding re-identification of articles and/or developing replacement part marking procedures to facilitate the proper identification of articles eligible to continue in-service and be installed on their aircraft.

b. Other Operators.

(1) Operators that do not have their own FAA-approved maintenance programs may still determine that an article is in an airworthy condition in the absence of identification data.

(2) If the operator wishes to re-identify articles or add additional information to its parts, it should follow the manufacturer's maintenance information or have the maintenance provider use its procedures for re-identification or adding information to an article.

c. Maintenance Providers.

(1) Maintenance providers performing work for an air carrier or commercial operator under part 145, § 145.205 must follow the operator's parts identification procedures. If there are no instructions, the maintenance provider should request written guidance from the operator. The operator may authorize the repair station to follow the repair station's own identification procedure; in such cases, the operator should clearly communicate this fact.

(2) Encourage maintenance providers to contact the design or production approval holder to obtain re-identification information. Unless contrary to § 145.205, obtaining a new identification plate, label, or tag from the manufacturer and following its instructions (e.g., CMM/Service Bulletin (SB)) is an acceptable method for remarking/re-identifying the part.

(3) Maintenance providers may develop their own written procedures for evaluating identification information and determining whether and how to re-apply illegible or missing data or add identification information. This should include:

- A receiving inspection that notes the identification marking is missing and/or illegible,
- The method for ensuring that the article is what it purports to be,
- The method for applying the re-identification or additional information in a manner that will not impact airworthiness, and
- The method the maintenance provider uses to document its identification information.

8. Disposition. We will incorporate the information in this notice into FSIMS before this notice expires. Direct questions regarding this notice to the Aircraft Maintenance Division, General Aviation and Avionics Branch (AFS-350) at (202) 385-6402.

ORIGINAL SIGNED by

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Director, Flight Standards Service