

 INCREMENTAL CHANGE

Release Notification Date: 08/30/2022

**SPM 70-23-28 STRIPPING THERMAL SPRAYED ALUMINUM OXIDE/NICKEL CHROME ALUMINUM YTTRIUM  
THERMAL SPRAY SEAL TEETH COATING ON RENE 88DT PARTS**

**DISCLAIMER**

The Incremental Changes published by GE Aviation are considered Instructions for Continued Airworthiness. These Incremental Changes, along with the current Manual revision and published Temporary Revisions, constitute the latest Instructions for Continued Airworthiness.

**GE Designated: -CONFIDENTIAL-**

The information contained in this document is GE proprietary information and is disclosed in confidence. It is the property of GE and shall not be used, disclosed to others or reproduced without the express written consent of GE, including, but without limitation, it is not to be used in the creation, manufacture, development, or derivation of any repairs, modifications, spare parts, designs, or configuration changes or to obtain FAA or any other government or regulatory approval to do so. If consent is given for reproduction in whole or in part, this notice and the notice set forth on each page of this document shall appear in any such reproduction in whole or part.

This technical data is considered subject to the Export Administration Regulations (EAR) pursuant to 15 CFR Parts 730-774. Transfer of this data by any means to a Non-U.S. Person, whether in the United States or abroad, without the proper U.S. Government authorization (e.g., License, exemption, NLR, etc.), is strictly prohibited.

Copyright (2022) General Electric Company, U.S.A.

HIGHLIGHTS

HIGHLIGHT REFERENCE    DESCRIPTION OF CHANGE

sk70-23-28-110-002    Technical Change: Changed procedure for the stripping thermal sprayed aluminum oxide/nickel chrome aluminum yttrium thermal spray seal teeth coating.

TASK 70-23-28-110-801

1. General.

**CAUTION:** FOR STRIPPING THERMAL SPRAY COATINGS FROM INCO 718 MATERIALS, DO NOT USE THIS PROCEDURE. USE TASK 70-23-22-110-041, STRIPPING OF THERMAL BARRIER TOP COATINGS AND NICKEL-CHROMIUM-ALUMINUM-YTTRIA BOND COATINGS.

**CAUTION:** THIS PROCEDURE REQUIRES SHOTPEENING PER TASK 70-47-01-380-016 AFTER STRIPPING PROCESS. FOLLOW THE SHOT PEEN REQUIREMENTS SPECIFIED FOR APPROPRIATE SEAL SERRATION COATINGS REPLACEMENT REPAIR PROCEDURE.

A. The method first lets the top coat (aluminum oxide) to be grit blasted and then the bond coat is chemically stripped off. This stripping method to be used on parts made of Rene 88DT.

2. Materials.

Subtask 70-23-28-110-001

Consumable Product	No.
Acid Stripping Solution	S1206
Maskant	C10-014
Solvent, General	C04-001
Solvent, General	C04-003
Tape, Platers	C10-067
Tape, Specialty Duct	C10-063

3. Procedure.

Subtask 70-23-28-110-002

**WARNING:** THIS IS STRONG ACID. WEAR FACE SHIELD AND PROTECTIVE CLOTHING. IF SOLUTION CONTACTS SKIN OR

EYES, FLUSH IMMEDIATELY WITH CLEAR WATER AND OBTAIN MEDICAL AID.

**CAUTION:** DO NOT GRIT BLAST EXCESSIVELY, PARTICULARLY IF THE COATING IS SPALLED OR MISSING IN PATCHES.

**CAUTION:** AIR AGITATION SHALL NOT BE USED FOR THIS PROCESS. ONLY MECHANICAL AGITATION CAN BE USED TO IMPROVE THE STRIPPING ACTION.

- A. Mask adjacent to seal coating with C10-067 platers tape or C10-063 duct tape to prevent grit blasting any basis metal adjacent to the coated area. Refer to TASK 70-21-04-120-A01, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning, Method No. 4A, using 220 mesh aluminum oxide, maintain air pressure at 30-45 psi (206-310 kPa) for direct pressure equipment or at 60-90 psi (414-621 kPa) for suction-type equipment with gun distance of 6-8 inches (152-203 mm) from the part with a recommended angle to the surface being blasted of 50 to 70 degrees.
- B. Mask any metal sprayed areas that are not to be stripped as follows:
  - (1) Mask metal sprayed areas to be stripped with masking tape, and seal all part opening with C10-067 platers tape.
  - (2) Dip the entire part into C10-014 maskant, and let it dry. Repeat until a minimum of 3 coats have been applied.
  - (3) Trim by cutting through the masking tape and the maskant around areas to be stripped. Expose only the area to be stripped by peeling away tape and maskant, but do not remove the alkaline resistant tape/maskant from the opening.
- C. Immerse the part in stripping solution S1206 for 2 hours at room temperature. Refer to TASK 70-00-99-801-803, S1206 - Acid Stripping Solution for Nickel-Chrome-Aluminum-Yttrium Plasma Coatings on Rene 88DT.
- D. Rinse the part in cold water and brush the coating with a soft bristle brush and inspect for removal. Repeat paragraphs 3.C and 3.D until the coating is removed, it can not be more than 4 hours in the acid stripping solution.
- E. Remove masking if needed by peeling away from the part. Use C04-003 acetone or C04-001 methyl-ethyl-ketone to remove any maskant or tape that does not peel away readily.
- F. Rinse by immersion in hot water at minimum 150°F (66°C).
- G. Dry the part using either of the following procedures:
  - (1) Alternative Procedure Available. Remove excess water by using a suction device or a blast of clean, compressed air, and then let the part air dry.
  - (2) Alternative Procedure: Oven dry: Move the part to an oven and dry at 175 to 225°F (79 to 107°C) until the part reaches the oven temperature and all traces of surface water are removed.
- H. If necessary, refer to TASK 70-21-03-160-001, Cleaning Method No. 3 - Steam Cleaning, TASK 70-21-05-120-A02, Cleaning Method No. 5 - Wet Abrasive Blast Cleaning, Method No. 5A, and then follow with a pure steam "rinse" to remove residue from the stripped area.

GE Designated: - CONFIDENTIAL Subject to the restrictions on the media