STABILIZER ABRASION BOOTS - REMOVAL/INSTALLATION

1. General

A. Airplanes may be equipped with two extruded rubber abrasion boots, one on the leading edge of each horizontal stabilizer. These boots are installed to protect the stabilizer leading edge from damage by rocks thrown back by propeller.

2. Preparation and Application of Bonding Material

A. Procedure.

WARNING: Cement and solvent vapors are toxic and extremely flammable. Use only in a well ventilated area away from sparks or vapors. Excess exposure could cause injury or death. If dizziness or nausea occur, obtain fresh air immediately. Avoid contact with skin or eyes. Use solvent resistant gloves to minimize skin exposure. Use safety glasses to minimize chance of eye contact. If eye contact occurs, flush eyes with water for 15 minutes and see a physician. If skin contact occurs, wash thoroughly with soap and water. If swallowed, do not induce vomiting. See a physician immediately.

WARNING: Verify aircraft is electrically grounded to prevent static sparks which could ignite solvent vapors.

(1) Adhesive EC1300L must be thoroughly stirred prior to application. A uniform coat of adhesive shall be brushed onto the masked off metal surface and onto the faying surface of the deice boot. When brushing on adhesives, use good quality, clean nylon brushes. Avoid hot air drafts from heaters or fans which can cause dragging and produce a very rough surface. The adhesive shall be allowed to dry thoroughly (at least one hour at 77°F and 50 percent relative humidity - lower temperatures and/or higher humidities require longer drying times to completely dry) and should not have any tack. A second uniform coat of adhesive shall be brushed onto each of the faying surfaces and allowed to dry like the first coat.

(2) The dry adhesive shall be covered and kept clean until it is reactivated. The adhesive shall be reactivated within 48 hours by wiping lightly with clean cheesecloth slightly moistened with Methyl n-Propyl Ketone (MPK). Only a small area, approximately 3 inches by 18 inches or less, shall be reactivated at one time. Do not allow the adhesives to become too dry before placing the deice boot in contact with the metal. Excessive rubbing or excessive solvent usage should be avoided so that adhesive will not be removed.

3. Stabilizer Abrasion Boots Removal/Installation

A. Remove Stabilizer Abrasion Boots (Refer to Horizontal Stabilizer - Removal/Installation, Figure 401).

(1) Methyl n-Propyl Ketone (MPK) shall be used to soften cement line. A minimum amount of this solvent should be applied to cement line as tension is applied to pull back boot. The removal should be slow enough to allow solvent to undercut boot so that parts will not be damaged. Excessive quantities of solvent on airplane must be avoided.

B. Install Stabilizer Abrasion Boots (Refer to Horizontal Stabilizer - Removal/Installation, Figure 401).

(1) Mask off boot area on leading edge of stabilizer with one inch masking tape, allowing a half-inch margin from boot edge.

CAUTION: Ensure that corrosion protection is not removed from metal surfaces during cleaning process.

(2) Clean metal surfaces of stabilizer where boot is to be installed and clean inside surface of abrasion boot thoroughly with Methyl n-Propyl Ketone (MPK). Wipe surface with clean cloth saturated in solvent. Cloth should be folded each time surface is wiped to present a clean area and avoid redepositing of grease. Wipe surface immediately with clean dry cloth. Do not allow solvent to dry on surface.

NOTE: Boots may be applied over properly cured epoxy primer. Boots shall not be applied over topcoat finishes. Topcoat finishes shall be removed with Strypeese or Easy-Strip.

(3) Apply EC1300 adhesive. Refer to Preparation and Application of Bonded Materials.

(4) Place a straight line along leading edge line of stabilizer and a corresponding line on inside of boot. Position center line of boot with leading edge line of stabilizer and, using a clean, lint free cloth heavily moistened with Methyl n-Propyl Ketone (MPK), reactivate surface of cement on stabilizer and boot, beginning at inboard end.

NOTE: Avoid excessive rubbing of cement, which would remove it from surface. Have enough help to hold boot steady during installation and avoid handling cemented surfaces.

(5) Roll boot firmly against leading edge, beginning at inboard end, being careful not to trap any air between it and stabilizer.

(6) If the boot should attach "off-course" (reference centerline on leading edge not coinciding with reference centerline on

boot), apply Methyl n-Propyl Ketone (MPK) with a small brush or squirt bottle to soften the bond line.

(a) Apply only a small amount of MPK while applying sufficient tension to peel back the softened adhesive.

(b) To prevent damage to the boot, avoid twisting, sharply bending, or jerking the boot loose from the bonded area. Allow solvent wetted area to dry thoroughly before continuing with applications. Reapply EC1300L adhesive as needed.

(7) Roll entire surface of boot applying pressure. Should an air pocket be encountered, carefully insert a hypodermic needle and allow air to escape.

(8) Apply a coat of GACO N700A Neoprene Coating or equivalent along trailing edge of boot to surface of skin, forming a neat, straight fillet.

(9) Remove masking tape and clean surfaces with MPK.

(10) Mask edge of boot for painting stabilizer.