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SERVICE KIT NO. SK-126B
Supersedes SK-126A

DATE: March 25, 1974
TITLE: FUEL TANK COVER SEALING KIT
SERIALS AFFECTED: All Models with Fuel Tank Access Covers
WEIGHT AND BALANCE CHANGE: Negligible

PARTS LIST

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
2	3C-200, Class B-1/2	Fuel Tank Cover Sealant Kit (1/2 pt.) (Churchill Chemical)

C A U T I O N

DO NOT STORE SEALANT AT ROOM TEMPERATURES GREATER THAN 80°F. SHELF LIFE IS 6 MONTHS.

DESCRIPTION OF REPAIR

This kit supplies the materials and instructions necessary to reseal the fuel tank access covers on one aircraft. Each of the two (2) 1/2 pint sealant kits provided in this kit contains enough sealant to completely seal the four (4) fuel tank access covers on one wing.

REPAIR INSTRUCTIONS

1. Drain all fuel from the fuel tank and remove the access covers.
2. Remove all existing old sealant from access covers and mating surfaces of the tank. The best method of removing sealant is with a chisel-like tool made of hard fiber. Remaining sealant may then be removed with aluminum wool, 3M Elek-Tro-Cut cloth or aluminum oxide paper. DO NOT USE STEEL WOOL OR SILICONE GRIT ABRASIVES. Using a lint free cheesecloth that has been dampened with MEK, alcohol (99% isopropyl) or acetone, wipe the surfaces to be sealed until the cloth shows no sign of dark smudge or stain.
3. Mix 3C-200 sealant with its 3C-200A accelerator by hand in a weight ratio of 10 to 1. Mix thoroughly for approximately 3-4 minutes or until no streaks of unmixed material are visible.

N O T E

ONE SEALANT KIT IS PROVIDED FOR EACH WING (FOUR ACCESS COVERS). IF WEIGHING FACILITIES ARE NOT AVAILABLE, MIX THE ENTIRE CONTENTS OF BOTH CONTAINERS IN ONE 1/2 PINT KIT TOGETHER FOR EACH WING BEING SEALED. THIS WILL PROVIDE THE PROPER MIXING RATIO. APPLICATION TIME OR MINIMUM WORK LIFE OF SEALANT IS 1/2 HOUR AFTER MIXING.

N O T E

WAX THE FUEL TANK FLOAT TO PREVENT IT FROM STICKING TO ANY SEALANT.

4. Apply a layer (approximately 1/16" thick), of the mixed sealant to the access cover mounting flange surfaces in the wing. Install the covers and wipe any excess sealant from the joints.

SEALANT CURING

1. Curing rate is 7 days under standard conditions of 77°F and 50% relative humidity. Application, tack free and cure time increase and decrease conversely with temperature. Low humidities increase tack free and cure times markedly.
2. The access cover sealant may be exposed to fuel and the aircraft returned to service 24 hours after application of the sealant if standard conditions of 77°F and 50% relative humidity are maintained throughout the 24 hours.

PRESSURE TESTING FUEL TANK

1. Plug vent line at outboard end.
2. To the fuel line leading from the sump to the fuel selector, attach a water manometer capable of measuring 20 inches of water.
3. To the quick drain, connect a well regulated supply of air (1/2 PSI MAXIMUM or 13.8 INCHES OF WATER). Nitrogen may be used where the tank might be exposed to temperature changes while testing.
4. Insure filler cap is installed and sealed.

C A U T I O N

DO NOT ATTEMPT TO APPLY PRESSURE TO THE TANK WITHOUT A GOOD REGULATOR AND A POSITIVE SHUT OFF IN THE SUPPLY LINE. DO NOT PRESSURIZE THE FUEL TANK TO MORE THAN 1/2 PSI OR DAMAGE MAY OCCUR.

5. Apply pressure slowly until 1/2 PSI or 13.8 inches of water is obtained.

N O T E

TEMPERATURE CHANGES WILL AFFECT PRESSURE READINGS. BE SURE TANK AND OUTSIDE AIR TEMPERATURE ARE EQUAL AND STABLE.

6. Allow time for pressure to stabilize.
7. Apply soap solution to any suspected leak areas and watch for bubbles.
8. If tank holds for 15 minutes, without pressure loss, tank is acceptable. If leakage does occur, make certain it has not been caused by a leaky fuel cap, fitting caps or vent line.
9. Reseal and retest if any leaks are found.

GRUMMAN AMERICAN AVIATION CORPORATION

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NOTE: REVISION "A" ADDED MIXING INSTRUCTIONS

REVISION "B" CHANGES PART NUMBER FROM CLASS B-2 TO CLASS B-1/2, REDUCES POT LIFE AND INCREASES CURE TIME.