U.S Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make: Cessna	Model: A185F
	Serial No.: 18502213	Nationality and Registration Mark: N3946Q
2. Owner	Name *(As shown on registration certificate)*: Mennen, Paul	Address *(As shown on registration certificate)*: 1452 Owen Sound Dr. Sunnyvale, Ca 94087

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	5. Repair	5. Alteration
AIRFRAME	*(As described in Item 1 above)*				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type / Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Greg Nielson 930 Owens Lake Dr. San Jose . Ca 95123	☒ U.S. Certificated Mechanic ☐ Foreign Certificated Mechanic ☐ Certificated Repair Station ☐ Manufacturer	603017766

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge

Date	Signature of Authorized Individual
7-9-2003	Greg Nielson

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY						
	☐ FAA Flt Standards Inspector	☐	Manufacturer	X	Inspection Authorization	Other *(Specify)*
	☐ FAA Designee	☐	Repair Station	☐	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7-9-2003	305641678	Mark W. Crouch

FAA Form 337 (12-88)

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA1603SO

This certificate, issued to Snider Aircraft Accessories, Inc.
P.O. Box 372
Vincennes, IN 47591

SN 1115

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part * of the * Regulations. *

Original Product — Type Certificate Number: *
Make: *
Model: *

*See attached FAA Approved Model List (AML) No. SA478CH for list of approved airplane models and applicable airworthiness regulations.

Description of Type Design Change:

Installation of Snider Speed Kit in accordance with the Snider Aircraft Accessories, Inc."Installation Manual for the Snider Speed Kit", Document No. SK180/185-0, Revision A, dated July 1, 1996, or later FAA approved revision.

Limitations and Conditions:

Compatibility of this design change with previously approved modifications must be determined by the installer. A copy of this Certificate and FAA Approved Model List (AML) No. SA1603SO amended August 26, 1996, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: August 15, 1983

Date of issuance: May 8, 1984

Date reissued: August 16, 1994

Date amended: October 11, 1984; November 26, 1985
August 26, 1996

By direction of the Administrator

(Signature)

Gregory J. Michalik, Senior Aerospace Engineer
Airframe & Administrative Branch
Chicago Aircraft Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

FAA APPROVED MODEL LIST (AML) NO. SA1603SO
SNIDER AIRCRAFT ACCESSORIES, INC.
FOR
INSTALLING SNIDER SPEED KIT

ISSUE DATE: 5/8/84

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION INSTRUCTIONS		AFM SUPPLEMENT NUMBER/DATE	AML AMENDMENT DATE
					NUMBER	REVISION NO. & DATE		
1	Cessna	180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K	5A6	CAR 3	SK180/185-0	Rev. A, dated 7/1/96	N/A	
2	Cessna	185, 185A, 185B, 185C, 185D, 185E, A185E, A185F	3A24	CAR 3	SK180/185-0	Rev. A, dated 7/1/96	N/A	

FAA APPROVED:

Gregory J. Michalik, Senior Aerospace Engineer
Airframe & Administrative Branch
Chicago Aircraft Certification Office

Amended: 8/26/96

INSTALLATION MANUAL for the SNIDER SPEED KIT

DOCUMENT NO: SSKIM / REV-0
ORIGINATED 07-01-96
CURRENT THROUGH REVISION E ON 08-01-02

READ BEFORE INSTALLATION

Before installing this kit it is recommended that the installer read the installation manual to gain a general knowledge of how the kit is designed and what will be required. The preparation page contains a list of tools and supplies that will be needed.

An approved set of lower wing strut cuffs must be installed on the aircraft as this kit is designed for use with wing strut cuffs.

The aircraft should be filled with fuel before installing this kit so that the landing gear will be weighted and flexed to the proper location for kit installation.

If installing the kit with 6.00 tires and wheel pants, the brake discs for 6.00 tires must be used. (check Cessna Service/Parts information manual for part number.)

For technical assistance phone:

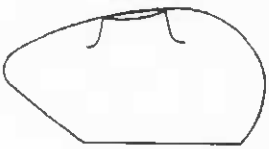
Day 812-882-6420
Night 812-769-4184
812-882-7515

PARTS LIST

SK180/185-2-102

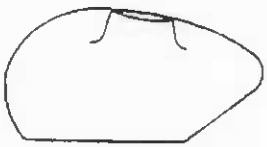
STRUT FAIRING

SK180/185-2-101



SK180/185-3-102

BRAKE FAIRING (800)

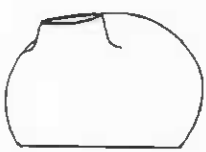


SK180/185-3-101

SK180/185-3A-102

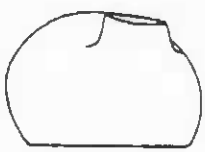
BRAKE FAIRING (600)

SK180/185-3A-101



SK180/185-3B-102

BRAKE FAIRING (ALL)



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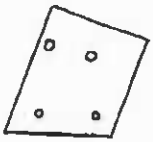
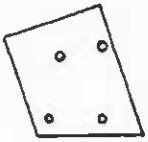
PARTS LIST



SK180/185-3BMBP-102

MOUNTING BRACKET PLATE



SK180/185-3BMBP-101

SK180/185-3BMB-102

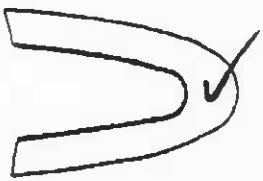
MOUNTING BRACKET

SK180/185-3BMB-101

SK180/185-4-102

STRUT FAIRING CUFF

SK180/185-4-101



SK180/185-1-102

STABILIZER CUFF

SK180/185-1-101

PARTS LIST

QTY			PART NUMBER	DESCRIPTION
2	(0)	[2]	 MS24694-C48	#10-32 x 13/32" FLAT HEAD SCREW
6	(4)	[6]	 MS24694-C49	#10-32 x 15/32" FLAT HEAD SCREW
8	(8)	[8]	 MS24693-C28	#6-32 x 1/2" FLAT HEAD SCREW
10	(10)	[10]	 MS24693-C29	#6-32 x 5/8" FLAT HEAD SCREW
2	(2)	[2]	 MS24693-C32	#6-32 x 1" FLAT HEAD SCREW
16	(12)	[0]	 MS24693-C274	#10-32 x 3/4" FLAT HEAD SCREW
0	(0)	[8]	 AN3-5A	#10-32 x 21/32" HEX HEAD BOLT
0	(0)	[4]	 AN365-1032	#10-32 NYLON INSERT LOCKNUT
18	(18)	[18]	 A6K75	#6-32 OPEN END - KEYED - RIVNUT (.010" - .075" GRIP RANGE)
2	(2)	[2]	 A6K120	#6-32 OPEN END - KEYED - RIVNUT (.075" - .120" GRIP RANGE)
4	(4)	[4]	 AN819-3D	3/16" ALUMINUM SLEEVE COUPLING
4	(4)	[4]	 AN818-3D	3/16" ALUMINUM NUT COUPLING
20	(20)	[20]	 TINNERMAN# A3236SS012-24A	#6 TINNERMAN COUNTERSUNK WASHER
24	(16)	[8]	 TINNERMAN# A3235SS012-24A	#6 TINNERMAN COUNTERSUNK WASHER

QUANTITIES IN () CORRESPOND TO INSTALLATION METHOD 1 STEPS 1-41 ONLY.
QUANTITIES IN [] CORRESPOND TO INSTALLATION METHOD 2.

PARTS LIST

QTY			PART NUMBER	DESCRIPTION
0	(0)	[8]	AN960-10	#10 FLAT WASHER
0	(0)	[4]	AN970-3	#10 LARGE AREA FLAT WASHER
16	(12)	[0]	MS21059-L3	#10-32 TWO-LUG FLOATING PLATENUT
8	(4)	[12]	130062	#10-32 FLOATING CLIPNUT
2	(2)	[2]		3/16" O.D. 5052 ALUMINUM TUBING WITH SILICON COATED FIBERGLASS SHEATHING

QUANTITIES IN () CORRESPOND TO INSTALLATION METHOD 1 STEPS 1-41 ONLY.
QUANTITIES IN [] CORRESPOND TO INSTALLATION METHOD 2.

APPLICABILITY

AIRCRAFT FOR INSTALLATION:
180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K,
185, 185A, 185B, 185C, 185D, 185E, A185E, A185F

The three parts that make up the landing gear portion of the speed kit are the strut fairing, strut fairing cuff, and the brake fairing. There are two different methods of installation for this portion of the speed kit. **Method I** explains the installation of the kit with an approved set of wheel fairings installed. **Method 2** explains the installation of the kit without wheel fairings.

There is no difference in the installation process between the various size tires and wheel fairings that may be installed.

Note: Installation of any of the following part #s requires the installation of an approved set of wheel fairings:

SK 180/185-3-101
SK 180/185-3-102
SK 180/185-3A-101
SK 180/185-3A-102

Note: Due to the differences in the thickness of various manufacturers' wheel fairings and lift strut cuffs, length of attachment screws may be changed as required so that 3 threads are exposed beyond the nut.

PREPARATION

Prior to beginning installation, it is recommended that the installer read the entire portion of this manual that is applicable.

Always read any notes following a step prior to initiating that step.

This kit requires the use of a 3/16" brake line; therefore, the fittings at the fuselage and caliper must be for 3/16" nut couplings. Some aircraft may have 1/4" fittings and will require an AN894-D4-3 adapter at the fuselage and an AN816-3D nipple at the caliper.

In addition to a standard set of tools, the following is a list of tools and supplies that will be needed during installation:

TOOLS

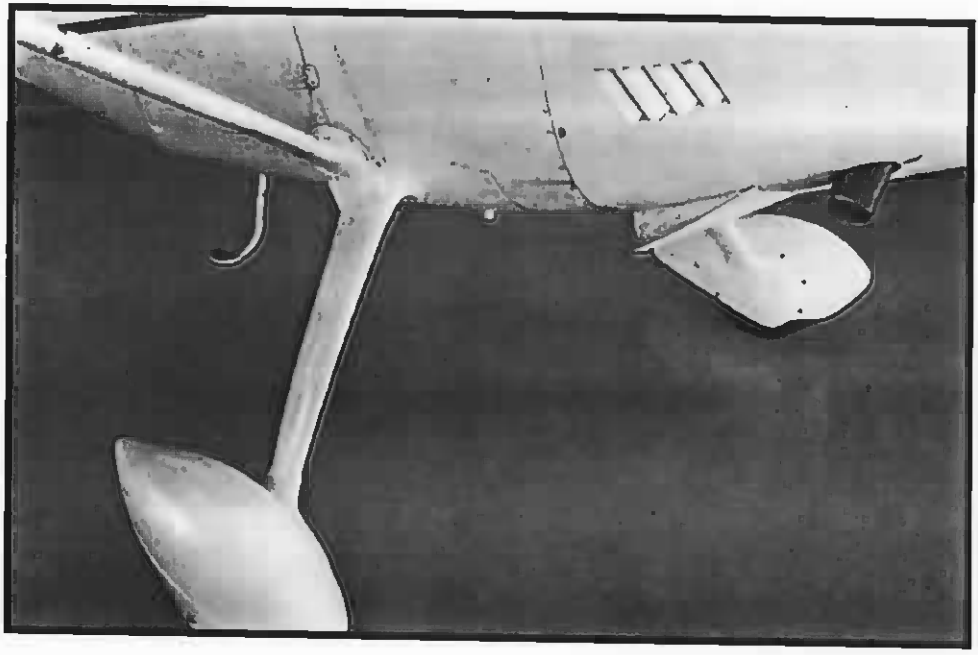
- Tubing cutter
- 37 degree flare tool
- Heat gun
- Numbered drill bit set
- 1/8" and 3/16" Cleco fasteners
- 3/16" diameter rat tail file
- Band saw (Recommended)
- Disc sander (Recommended)
- Dremel tool with bit # 113 (Recommended for cutting the keyway for keyed rivnuts.)
- #6-32 rivnut installer
- Countersinking tool
- Air hammer (Method I only)
- Bucking bar (Method I only)

SUPPLIES

- Two 1/4" dowel rods
- Electrical tape
- MS20426AD 100 degree 3/32 dia. solid rivets of assorted lengths. (Method I only)

STRUT FAIRING
STRUT FAIRING CUFF
AND BRAKE FAIRING

METHOD I



1. Disconnect the brake line from the wheel cylinder fitting and the fitting exiting the fuselage.

2. Remove any existing brake line clips and the brake line itself.

3. Make up a new brake line from the supplied materials and route it across the gear leg at the top and down the leading edge as shown in Figure 1-1.

Note #1
The supplied aluminum tubing is sheathed with silicon coated fiberglass tubing for chaffing resistance.

Note #2
Due to the limited space through which the brake line must be routed, 3/16" tubing must be used. This brake line requires AN818-3D nut couplings (supplied). If the existing fittings on the aircraft are a size other than 3/16", an adapter will be required at the fuselage fitting and an AN816-3D nipple or an AN823-3D 45 degree elbow installed in the wheel cylinder.

Figure 1-1

4. Remove the new brake line.

5. Hoist or jack the aircraft and remove the main wheel and axle as described in the Cessna Service Manual.

Note #1
If the aircraft is jacked from a position on the gear strut, be sure that enough room is left below the jack to slip the strut fairing cuff and brake fairing onto the strut and still be able to reinstall the axle and main wheel. (Refer to Figure 1-2.)

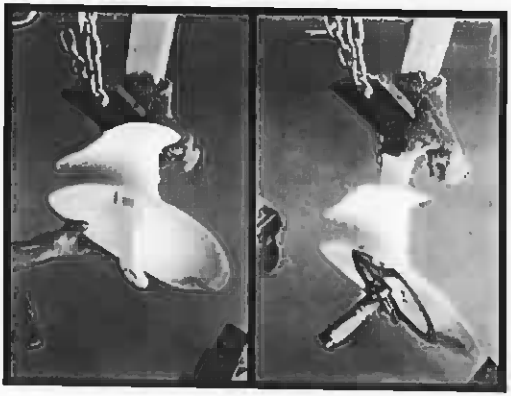


Figure 1-2

Note #2
Be sure to mark or tape together the wheel alignment shims so they will be reinstalled in the same position as they were removed to ensure that wheel alignment is not disturbed.

6. Slip the strut fairing cuff and the brake fairing onto the strut and then reinstall the axle and wheel as described in the Cessna Service Manual.

Note
Be sure to install the mounting plate for the wheel fairing at this time.

7. Let the aircraft down from the hoist or jack and roll it back and forth a few feet so that the gear will return to its normal position for proper fit of the speed kit.

8. Install the wheel fairing.

Note
The wheel fairing has to be mounted to match the position of the brake fairing. Do not drill any holes in the wheel fairing at this time as they would likely be incorrect.

9. Tape a 1/4" dowel rod to the leading edge of the landing gear strut as shown in Figure 1-3.

Figure 1-3

Note
This simulates the new brake line and ensures proper fit of the speed kit during installation.

10. With the strut fairing cuff and brake fairing at the very bottom of the strut, open the strut fairing and slip it on as shown in Figure 1-4.

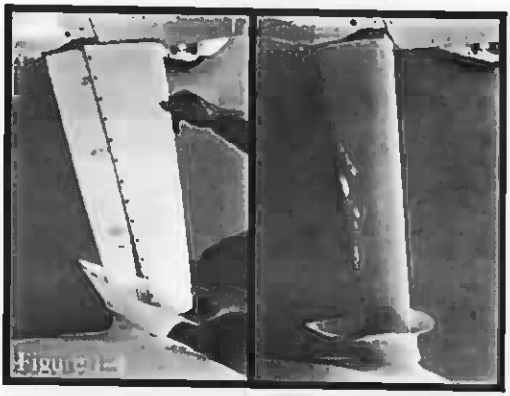


Figure 1-4

Note
It is very important to leave the strut fairing as long as it can possibly be and still be able to get it on the strut and install the hinge pin without damaging the brake fairing. If the strut fairing is simply too long for this, cut off as little as necessary from the **top end only.** Be sure to make the cut parallel to the top end of the fairing. Also be sure to cut the hinge pin off so that its length from the bend is equal to the trailing edge. The end of the pin should be sharpened to make it easier to install.

11. Slide the strut fairing cuff up to the fuselage.

12. Install the hinge pin from the bottom as shown in Figure 1-5.

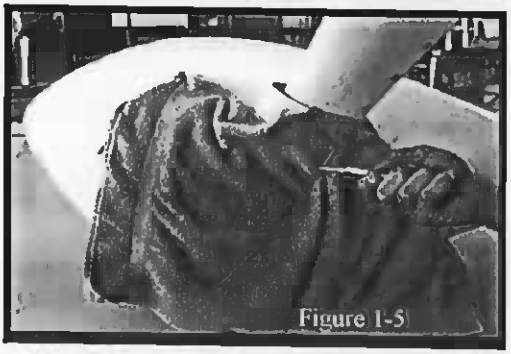


Figure 1-5

13. Make a pencil mark on the leading and trailing edges of the strut fairing 1-3/16" from both the top and bottom ends. (4 marks)

14. Slip the brake fairing on the strut fairing as shown in Figure 1-6.

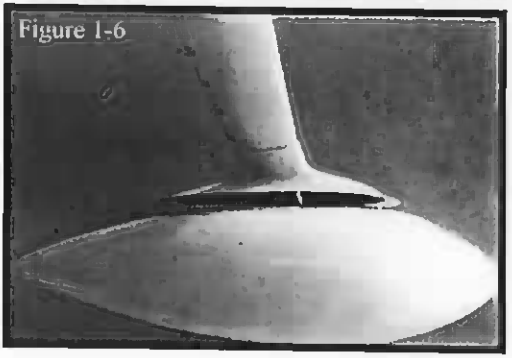


Figure 1-6

15. With the cuff held in position against the fuselage, slide the strut fairing down the strut until it just fills the opening in the cuff as shown in Figure 1-7. The cuff should now be in the proper position for drilling the attachment holes.

Note #1
The strut fairing fits the strut very snug and may not slide easily. Care must be used to not jam the strut fairing into the brake fairing as damage to the brake fairing could occur. Short downward slaps to the top side of the strut fairing are recommended for moving it down the strut.

Note #2
When fitting the strut fairing cuff and brake fairing, be sure that the strut fairing is pushed aft on the strut.

Note #3
A heat gun may be used around the perimeter of the cuff to slightly soften the plastic enough to mold it perfectly to the contour of the fuselage and wing strut cuff. Heat should only be applied to the perimeter of the cuff where it meets the fuselage and wing strut cuff. Extreme care must be used to not overheat the plastic nor heat it in any other area than that mentioned above or extreme distortions will occur.

Figure 1-7

16. Use a #28 or 9/64" drill bit to drill holes through the cuff and fuselage skin at the six locations marked by dimples in the cuff. These dimples do not show up very well in a photograph; therefore, Figure 1-8 shows these holes already drilled with Cleco fasteners installed.

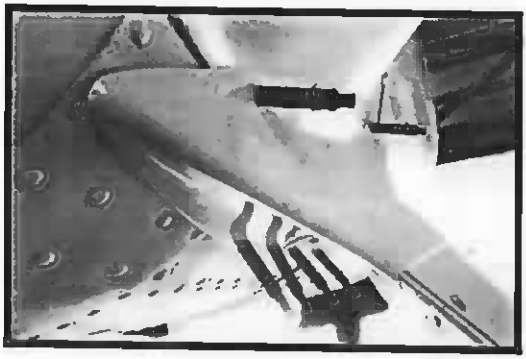


Figure 1-8

Note #1
The position of the forward upper hole in the cuff may vary slightly forward or aft depending on the type of wing strut cuffs installed and should be the first hole drilled. This is why the dimple at this location is less distinct. The hole should be approximately centered between the wing strut cuff and the doubler in the fuselage skin. (Refer to the location of the forward Cleco in the upper photo of Figure 1-11 as an example.)

Note #2
Install a Cleco fastener after each hole is drilled to help hold the cuff in its proper position while drilling the remaining holes.

17. With six Cleco fasteners holding the cuff in place, position the strut fairing so that it just fills the opening in the cuff. The brake fairing should now be against the wheel fairing. If the wheel fairing is mounted at the correct pitch, roll, and yaw angles, the brake fairing will match it as shown in Figure 1-9.

Note #1
It may be necessary to enlarge the opening in the cuff and/or brake fairing at its trailing edge in order to get a perfect fit at both ends. This should be carefully done with a 3/16" diameter rat tail file. It is very important that the strut fairing is inserted into both the cuff and the brake fairing openings at least 1-3/16". This is assured by making certain that the strut fairing is inserted to at least the marks made in step 13.

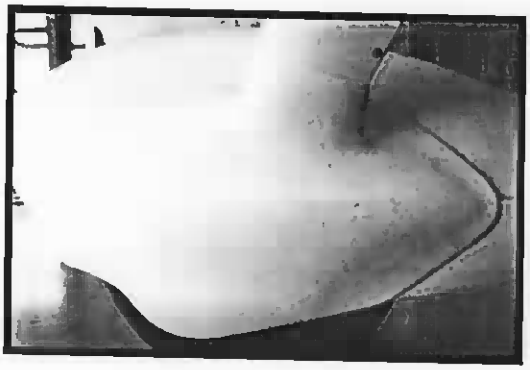


Figure 1-9 (600 tire)

Note #2
If the brake fairing must be twisted or put in a bind to get it to fit the wheel fairing as shown, then the wheel fairing must be remounted so that it will match the brake fairing.

18. Use a #12 or 3/16" drill bit to drill holes through the brake fairing and wheel fairing at the six locations marked by dimples in the brake fairing. These dimples do not show up very well in a photograph, therefore, Figure 1-10 shows these holes already drilled with Cleco fasteners installed.

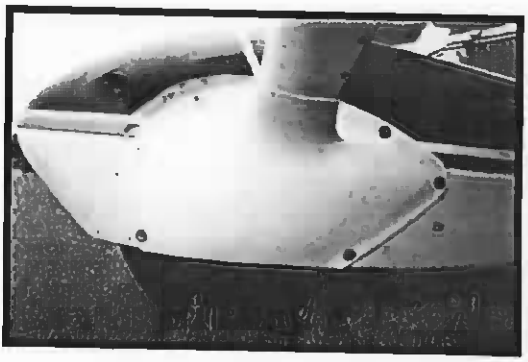


Figure 1-9 (800 tire)

Note
Install a Cleco fastener after each hole is drilled to help hold the fairing in its proper position while drilling the remaining holes.

19. With six Cleco fasteners holding the brake fairing in place, slide the strut fairing slightly up or down so that the openings in the cuff and brake fairing are completely filled.

Note
Refer to Note #1 in step 17 above.

Figure 1-10

20. Draw a light pencil mark around the strut fairing at the openings of both the cuff and the brake fairing as shown in Figure 1-11.

21. Use a #12 or 3/16" drill bit to drill holes through the cuff and strut fairing at the two locations marked by dimples in the cuff. These dimples do not show up very well in a photograph; therefore, Figure 1-12 shows these holes already drilled.

22. Remove the Cleco fasteners from the brake fairing.

23. Slide the strut fairing up the strut as far as it will go and remove the hinge pin.

24. Remove the Cleco fasteners from the cuff and slide it to the bottom of the strut.

25. Remove the strut fairing.

26. Cut the strut fairing off 1-3/16" outboard of each line drawn in step 20.

Note
These cuts may be made with a hacksaw or band saw and should be made parallel to the pencil lines. Use electrical or masking tape to mark the lines to be cut as shown in Figure 1- 13. For the final 1/8" or so a disc sander is recommended.

27. Cut the hinge pin off so that its length from the bend is equal to the trailing edge of the strut fairing.

Note
The end of the hinge pin should be sharpened to make it easier to install.

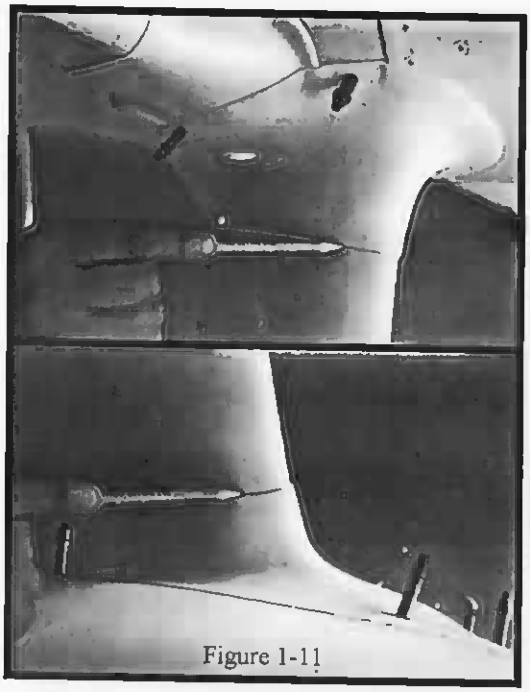


Figure 1-11

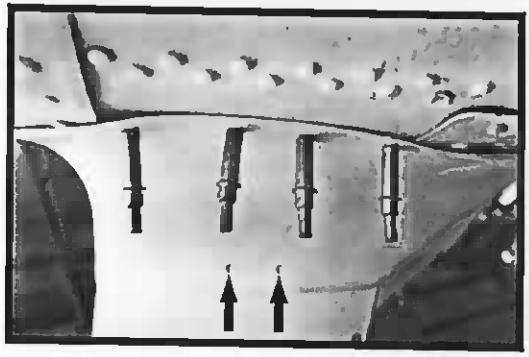


Figure 1-12

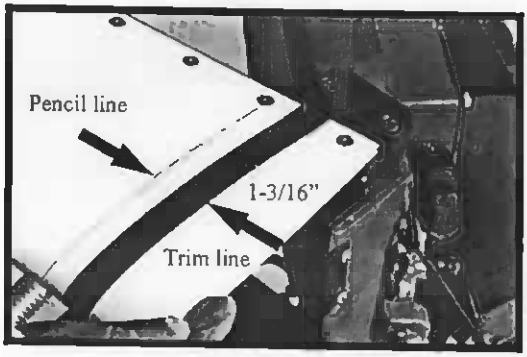


Figure 1-13

28. Install # 10-32 clipnuts in the two holes drilled in the strut fairing.

Note
The holes may need to be countersunk slightly to let the clipnuts fit properly as shown in Figure 1-14.

29. Redrill the six strut fairing cuff attachment holes in the fuselage with a #12 drill bit and install #6-32 keyed rivnuts.

Note
Rivnuts at positions 1-5 have .010"- .075" grip range while the rivnut at position 6 has a .075"- .120" grip range. (Refer to Figure 1- 15.)

30. Remove the wheel fairing and install #10-32 two-lug floating plate nuts on the inside of it at the six attachment holes for the brake fairing.

Note
The plate nuts should be riveted inside the wheel fairing with MS20426AD 100 degree flush head rivets.

31. Countersink the six #12 or 3/16" holes in the brake fairing and the two #12 or 3/16" holes in the bottom of the strut fairing cuff just enough so that #10 Tinnerman countersunk washers will lie flush.

32. Countersink the six #28 or 9/64" holes in the strut fairing cuff just enough so that #6 Tinnerman countersunk washers will lie flush.

33. Remove the dowel rod from the gear strut.

34. Reinstall the new brake line.

Note
No clips are necessary as the strut fairing will hold the brake line in place.

35. Bleed and fill the brake system and then check for leaks.

36. Reinstall the wheel fairing.

37. Slip the strut fairing onto the strut and install the hinge pin.

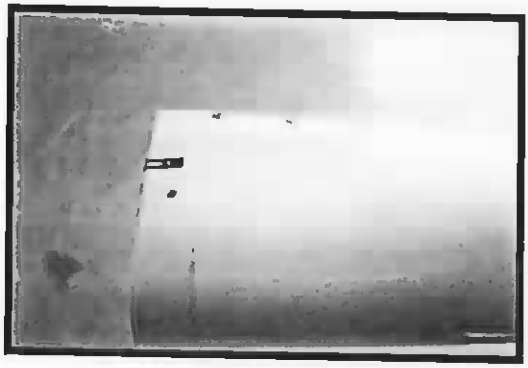


Figure 1-14

Figure 1-15

38. Safety wire the hinge pin in place as shown in Figure 1-16.

39. Slide the strut fairing cuff up to its position and fasten with six #6 Tinnerman countersunk washers and MS24693-C29 machine screws.

Note
Use an MS24693-C32 screw in the top aft hole. (Position 6 in Figure 1-15.)

40. Place the brake fairing on the strut fairing and then slide the strut fairing up or down the strut to align the two holes drilled in the bottom of the cuff in step 21. Install two #10 Tinnerman countersunk washers and MS24694-C49 machine screws.

41. Fasten the brake fairing to the wheel fairing with six #10 Tinnerman countersunk washers and MS24693-C274 machine screws.

STOP, continue the following steps only if you desire to be able to remove the entire kit without being required to remove the tire, axle, brake caliper, etc. Otherwise, **Repeat steps 1-41 for the other side.**

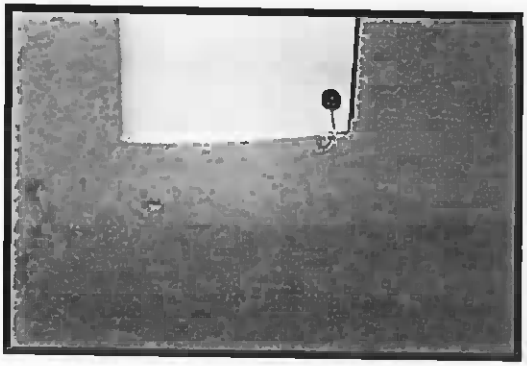


Figure 1-16

The following steps explain how to split the brake fairing and strut fairing cuff. **Remember, it is not necessary to remove these two parts in order to remove the strut fairing and perform normal landing gear and brake component maintenance.**

42. Place a piece of tape on the strut fairing so that one edge is 1-3/4" forward of and parallel to the trailing edge and continues a straight line completely across the brake fairing as shown in Figure 1-17.

43. Use the edge of the tape as a guide to draw a pencil line across the brake fairing and then remove the tape.

44. Use a #12 or 3/16" drill bit to drill four holes at the locations where screws are installed in figure 1-18.

45. Place a piece of tape on the strut fairing cuff so that one edge forms a straight line across the part and half way between the screws as shown in Figure 1-19.

46. Use the edge of the tape as a guide to draw a pencil line across the cuff and then remove the tape.

47. Disassemble the kit and remove the strut fairing.

48. Use an Exacto or other razor type knife to carefully split the brake fairing and cuff along the pencil lines and then remove them from the strut.

49. Countersink the four holes drilled in the brake fairing in step 44 just enough so that #10 Tinnerman countersunk washers will lie flush.

50. Install #10-32 clipnuts in the two holes drilled through the strut fairing in step 44.

51. Remove the wheel fairing and install #10-32 two-lug floating plate nuts behind the two holes drilled through it in step 44.

52. Reinstall the wheel fairing and the strut fairing.

Figure 1-17

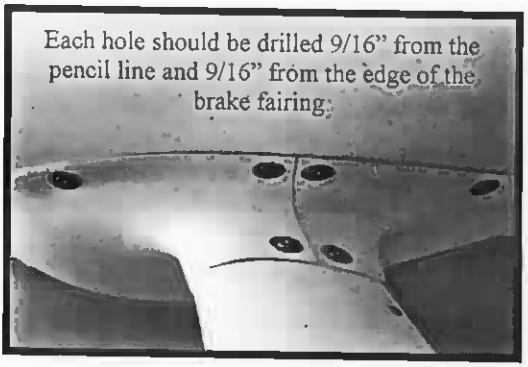


Figure 1-18

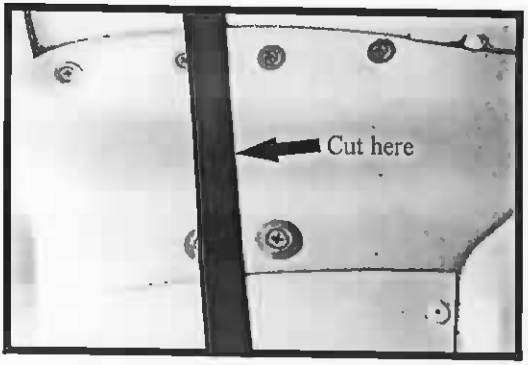


Figure 1-19

53. Place the cuff and brake fairing on the strut using the technique shown in Figures 1-20 and 1-21 respectively.

Figure 1-20

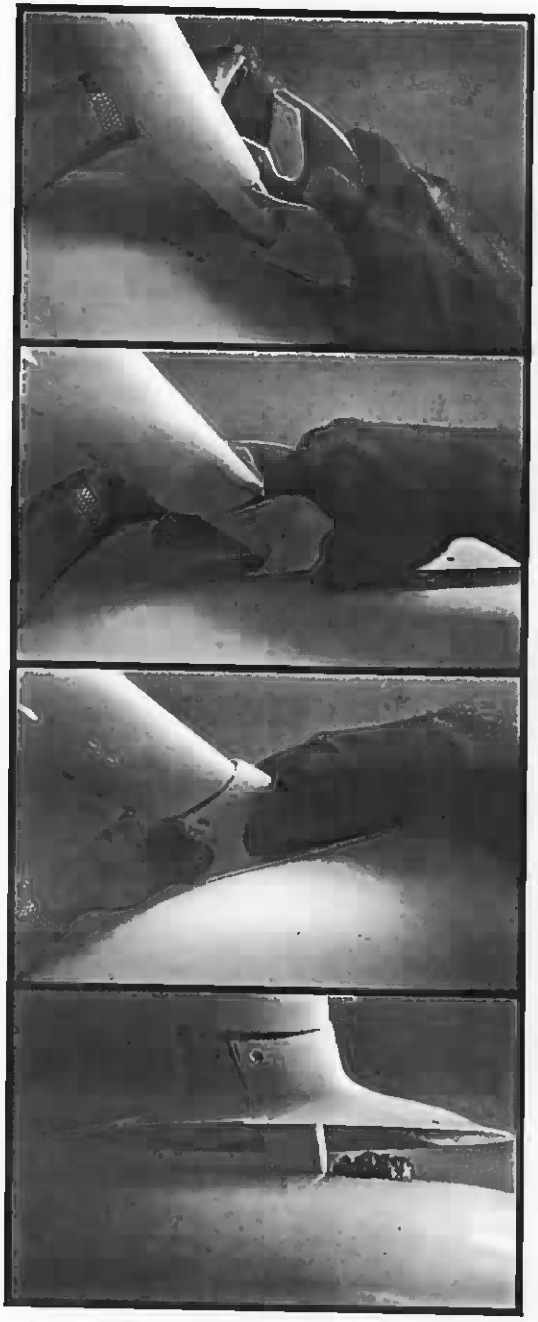


Figure 1-21

54. Reinstall all screws, washers, and safety wire. (Refer to figure 1-22 for proper screw sizes for the additional holes drilled in the brake fairing.)

Repeat for the other side.

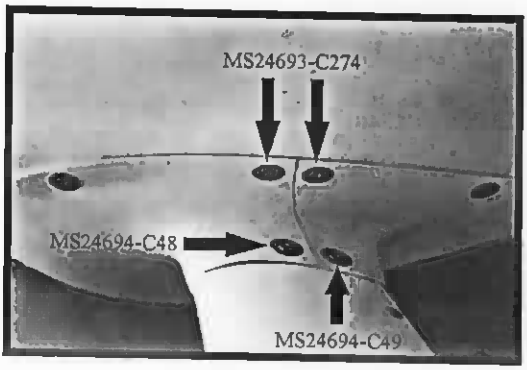
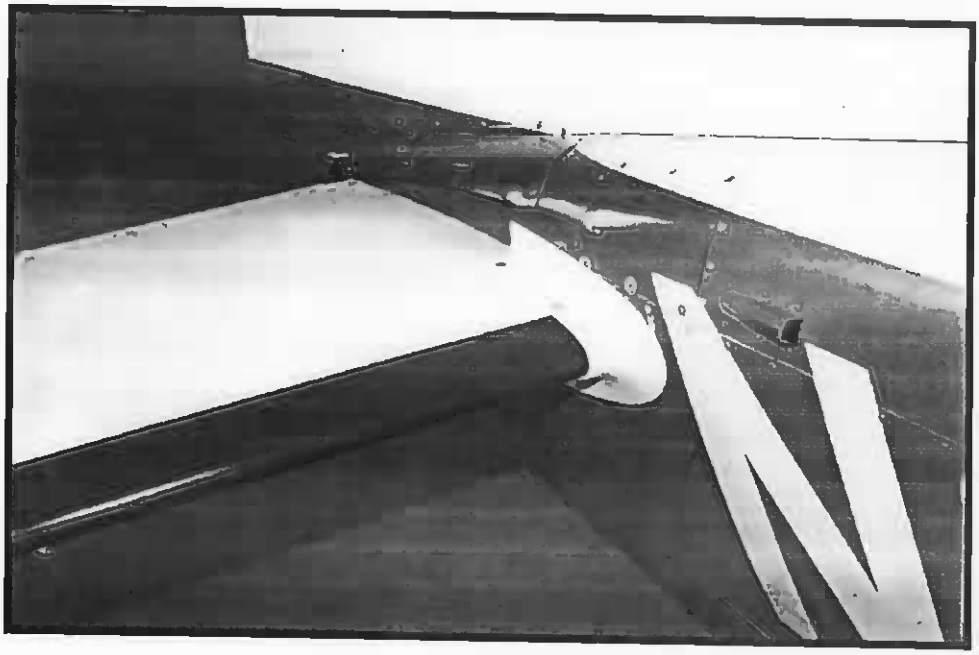


Figure 1-22

STABILIZER CUFF

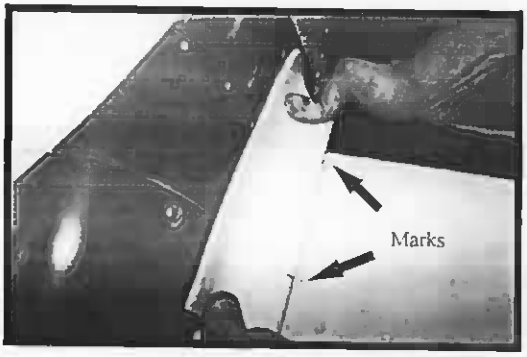


1. Set the stabilizer trim wheel half way between the take-off position and full aircraft nose up.

2. Slip the cuff onto the inboard end of the stabilizer and press it against the fuselage with just enough tension so that it will remain against the fuselage throughout the trim range of the stabilizer.

Note #1
A gap will form between the top portion of the cuff and the fuselage as the stabilizer approaches full aircraft nose down trim. This is normal and may be disregarded.

Note #2
If the aircraft data plate is in the area where the cuff makes contact with the fuselage, it may be necessary to relocate it or replace its rivets with flush ones and/or bevel its edges.

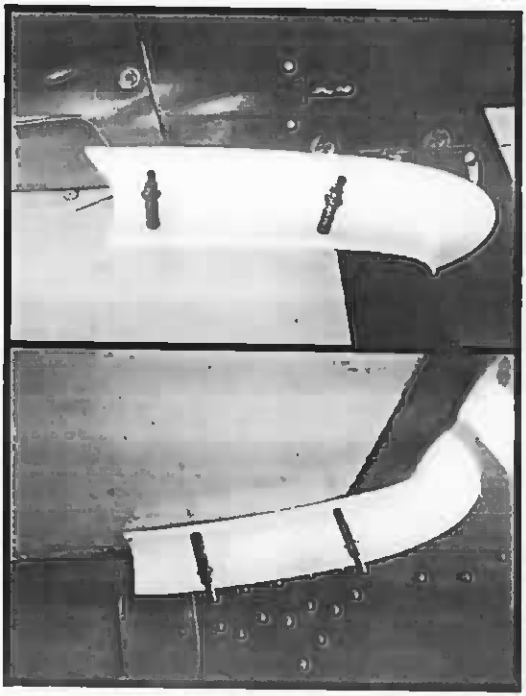


C-1

3. Mark the position of the cuff on the stabilizer as shown in Figure C-1. This will help keep the cuff in its proper position while drilling the attachment holes.

4. Use a #28 or 9/64" drill bit to drill holes through the cuff and the stabilizer at the four locations marked by dimples in the cuff. These dimples do not show up very well in a photograph; therefore, Figure C-2 shows these holes already drilled with Cleco fasteners installed.

Note
Install a Cleco fastener after each hole is drilled to help hold the cuff in its proper position while drilling the remaining holes.


C-2

5. With four Cleco fasteners holding the cuff in place and the trim set as in Step 1, mark the top of the cuff with electrical or masking tape as shown in Figure C-3.

Note
Notice that the edge of the tape is aligned with the cutout in the fuselage where the stabilizer goes through.

6. Set the stabilizer trim wheel half way between the take-off position and full aircraft nose down and then mark the bottom of the cuff with electrical or masking tape as shown in Figure C-4.

Note
Notice that the edge of the tape is aligned with the cutout in the fuselage where the stabilizer goes through.

7. Remove the cuff and trim to the edge of the tape by holding the cuff at an angle to a disc or belt sander as shown in Figure C-5.

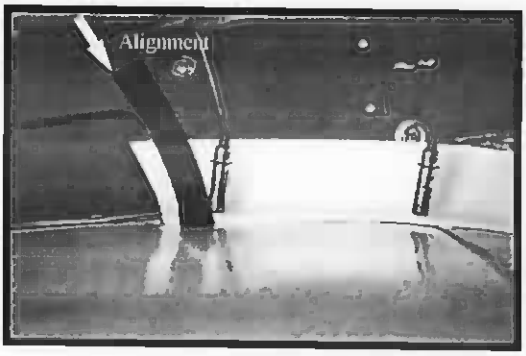
8. Countersink the four #28 or 9/64" holes in the cuff just enough so that #6 Tinnerman countersunk washers will lie flush.

9. Redrill the four attachment holes in the stabilizer skin with a #12 drill bit and install #6-32 keyed rivnuts with .010"-.075" grip range.

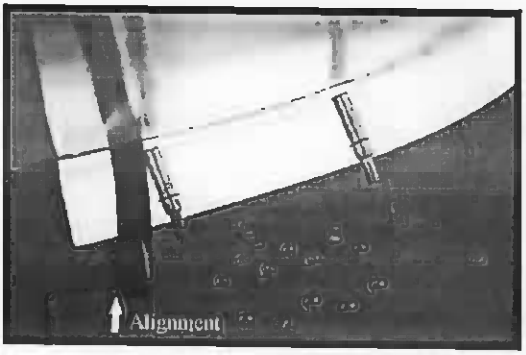
10. Reinstall the cuff with four #6 Tinnerman countersunk washers and MS24693-C28 machine screws.

11. Run the stabilizer trim through its full range several times to check for free movement.

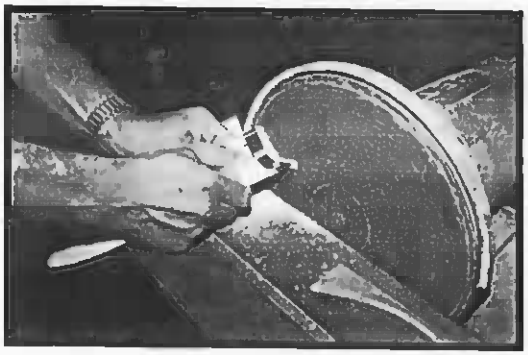
Repeat for the other side.



C-3



C-4



C-5

APPENDIX A
WEIGHT & BALANCE DATA

PART NUMBER	DESCRIPTION	WEIGHT	ARM
SK180/185-1-101	R-STABILIZER CUFF	.25 lbs.	+207"
SK180/185-1-102	L-STABILIZER CUFF	.25 lbs.	+207"
SK180/185-2-101	R-STRUT FAIRING	1.6 lbs.	+22"
SK180/185-2-102	L-STRUT FAIRING	1.6 lbs.	+22"
SK180/185-3-101	R-BRAKE FAIRING (800)	1.0 lbs.	+22"
SK180/185-3-102	L-BRAKE FAIRING (800)	1.0 lbs.	+22"
SK180/185-3A-101	R-BRAKE FAIRING (600)	1.0 lbs.	+22"
SK180/185-3A-102	L-BRAKE FAIRING (600)	1.0 lbs.	+22"
SK180/185-3B-101	R-BRAKE FAIRING (ALL)	*1.9 lbs.* (See below)	+22"
SK180/185-3B-102	L-BRAKE FAIRING (ALL)	*1.9 lbs.* (See below)	+22"
SK180/185-3BMB-101	R-MOUNTING BRACKET	.25 lbs.	+22"
SK180/185-3BMB-102	L-MOUNTING BRACKET	.25 lbs.	+22"
SK180/185-3BMBP-101	R-MOUNTING BRACKET PLATE	.15 lbs.	+22"
SK180/185-3BMBP-102	L-MOUNTING BRACKET PLATE	.15 lbs.	+22"
SK180/185-4-101	R-STRUT FAIRING CUFF	.45 lbs.	+22"
SK180/185-4-102	L-STRUT FAIRING CUFF	.45 lbs.	+22"

* 1.4 lbs. if part has a fiberglass inlay. *

APPENDIX B
CLEANING AND PAINTING

Snider Speed Kit components are made of Kydex 100 acrylic/PVC thermoplastic. Kydex 100 is highly resistant to a wide range of chemicals and will not be harmed by aircraft liquids such as fuel, oil, and brake fluid.

CLEANING

Kydex 100 may be cleaned safely and repeatedly using the same cleansers used to wash aircraft and clean aircraft windscreens. Chemicals such as MEK, Acetone, Trichlorethylene, and Toluene should not be used as they may attack Kydex 100.

PAINTING

Kleerdex Company, the maker of Kydex 100, recommends polyurethane paints for painting Kydex 100. The following types of paints have provided poor adhesion in laboratory testing and are therefore not recommended: Epoxy Paints, Water-based Paints, Latex Paints, and Enamels.

Paint adhesion may be increased through the use of one or more of the following methods:

- Sanding - Sand the surface using fine grit sandpaper. This will roughen the surface and make it more suitable for paint adhesion. Wipe the surface with a dry cloth after sanding to remove debris.

- Isopropyl Alcohol (IPA) Wiping - Wipe the surface using IPA or rubbing alcohol prior to painting. This method of treatment helps paint attack the surface and create a strong bond.

- Retarding Agents - Retarding Agents are available from paint manufacturers which have increased paint adhesion in laboratory testing. These agents cause the paint mixture to evaporate slower, giving the paint more time to attack and adhere to the surface.