



American Aviation Corporation
318 Bishop Road Cleveland, Ohio 44143

SERVICE

Accessory Kit No. AK-115

DATE: August 25, 1969

TITLE: Radio Cooling Kit for Narco Mark III and Mark VIII

MODELS AFFECTED: AA1-0017 through 0189 with Narco Mark III or Mark VIII Radio Installed

WEIGHT AND BALANCE CHANGE:
Weight Increase: .25 lbs.
Arm: 57.00 in.

Parts List

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	901047-501	Snorkel Assembly
1	901047-1	Air Scoop
4	1601-0410	Rivet
4	1604-0412	Rivet
1	802008-1	Tubing
2	A-12	Clamp
*1	51664-2	Elbow
*1	81297-5	Snap Ring
1	12 inches	Karoseal Lacing

*Aircraft later than AA1-0189 have these parts already installed.

Description of Installation

1. Installation of radio cooling unit and attaching hardware.
2. Estimated time to accomplish this installation is two (2) man hours.

Installation Instructions

1. If serial number of aircraft is AA1-0186 or lower, radio must be removed and elbow (51664-2) and snap ring (81297-5) installed.

Removal of Radio

1. Remove the active radio fuse from the instrument panel.
2. Single radio installation. Reach under instrument panel and disconnect NAV and COMM antennae making certain correct markings are on cables so that exact antenna to plug reconnection can be made.
3. Disconnect radio power connector from rear of radio.

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4. Remove security cover plug (plastic) on face of radio and insert 5/64 Allen wrench and loosen screw. Do not remove screw.
5. Remove radio at this time being careful not to snag or pull cable in rear of radio.

Installation of Elbow and Snap Ring

6. Elbow to be installed on case which is still in aircraft. (Case need not be removed to make this installation.)
7. Elbow to be inserted from aft side of case, (forward in aircraft) with elbow in approximately the 10 o'clock position looking forward.
8. Snap ring to be forced over elbow from inside of case. Snap ring should go all the way on. This ring is used as a retainer only.
9. Radio can now be installed or can be installed after Cooling Kit installation is complete.
10. Reinstallation of radio may be made by sliding radio back into case, guiding the power cable through right side hole in rear of case being careful not to damage plug. Tighten Allen screw and replace plastic security plug on face of radio. Reinsert antennae plugs into rear of radio making sure that COMM plug goes to COMM jack and NAV plug goes to NAV jack, secure power plug. (Be absolutely certain that all cabling is free of control column.)

11. Reinstall radio fuse into instrument panel.

Installation of Cooling Kit

Disregard above instructions for AA1-0190 and up.

1. Remove glare shield by removing screws under windshield.
2. Disconnect defroster hose at glare shield end.
(Refer to figure #1 for hole locations. Following holes to be drilled on left side of aircraft.)
3. Drill one (1) .656 dia. hole through honeycomb side panel.
4. Drill four (4) .136/.139 dia. holes on inside of honeycomb skin.
5. Drill four (4) .136/.139 dia. holes on outside of honeycomb skin.
6. Deburr all holes and be very careful not to scratch outside surface of aircraft.
7. Install 901047-501 snorkel assembly to inside of aircraft with four (4) 1601-0410 rivets, using "pop" rivet tool (United Shoe Machinery Company Part No. PRG410, or equivalent).
8. Install 901047-1 air scoop on outside of aircraft using four (4) 1604-0412 rivets. Large opening on scoop should be facing forward.

9. Attach 802008-1 tubing, one end to snorkel assembly and the other end to elbow on radio.
(Note: A-12 clamps, one on each end of tube, should be installed over tube ends before attaching tubing to snorkel and elbow. 802008-1 tubing to be installed so that the natural curve or bend that the tubing takes is on top and as close to top center instrument panel support angle as possible.)
10. Wrap and tie up tube to support angle with Karoseal lacing, being careful not to pull tubing too close to angle (approximately 2"). If tube is pulled too tight, it will cause the tube to kink and reduce efficiency of the Cooling Kit.
11. Push tubing completely over elbow and snorkel assembly and center A-12 clamps on snorkel and elbow for safe gripping action by the clamps.
12. If radio was left out, it can now be installed at this time.
13. Glare shield and defroster hose can now be replaced and screws can be inserted and tightened down.
14. Perform a thorough visual and operational check of all control surfaces. Pay particular attention to the free movement of the control column and insure that no possibility exists of cable fouling or chaffing.
15. Prime and paint air scoop to match aircraft.
16. Installation is now complete.

SERVICE

Accessory Mit S. AK-115

802008-1
Tube (1)

Karoseal
Lacing

102341-1 Instrument Panel Brace

VIEW LOOKING FORWARD

Fuselage Sta. 57.00

81297-5
Snap Ring (1)

51664-2
Elbow (1)

A-12 Clamp (2)

Cowl Deck
Trimline

.136 dia. (4) holes thru
.139 outer surface only
(use 901047-1 scoop for
template)

.65 dia.
(1) hole

1601-0410
Rivet (4)

901047-501
Snorkel Assy (1)

901047-1
Air Scoop (1)

W.L. 46.00

1604-0412
Rivet (4)

FORWARD FACE FIREWALL

7.00"

.94

.94

1.00

.65 radius

.136 dia. (4) holes thru
.139 inner surface only
(use 901047-501
snorkel assy for
template)

1601-0410
Rivet (4)

W LOOKING INBOARD L. H. SIDE

FIGURE