



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 *QRB*  
*WP-27 OAK-FSDO*

**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 of 1958).

<b>1. Aircraft</b>	Make <b>Republic</b>	Model <b>RC-3</b>
	Serial No. <b>1000</b>	Nationality and Registration Mark <b>N5166B</b>
<b>2. Owner</b>	Name (As shown on registration certificate) <b>Davey Darrell L Davey Deborah A</b>	Address (As shown on registration certificate) <b>6613 Santa Rosa Rd Camarillo Ca 93012-5672</b>

**3. For FAA Use Only**

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, Section 43.7

*9-20-99*      *[Signature]*  
DATE                      SIGNATURE                      OAK-FSDO

**4. Unit Identification**

Unit	Make	Model	Serial No.	5. Type	
				Repair	Alteration
AIRFRAME	~~~~~(As described in Item 1 above)~~~~~				<input checked="" type="checkbox"/>
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

**6. Conformity Statement**

<b>A. Agency's Name and Address</b> <b>Kenneth L. Thompson PO Box 411 Vineburg, Ca. 95487</b>	<b>B. Kind of Agency</b> <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	<b>C. Certificate No.</b> <b>545767051</b>
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**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 <b>9-20-99</b>	Signature of Authorized Individual <i>Ken Thompson</i>
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**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

<b>BY</b>	FAA Fit. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection <b>9-20-99</b>	Certificate or Designation No. <b>552273581</b>	Signature of Authorized Individual <i>[Signature]</i> Douglas P. Smith
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## NOTICE

*Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.*

### 8. Description of Work Accomplished

*(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)*

Republic RC-3 Ser# 1000 N5166B

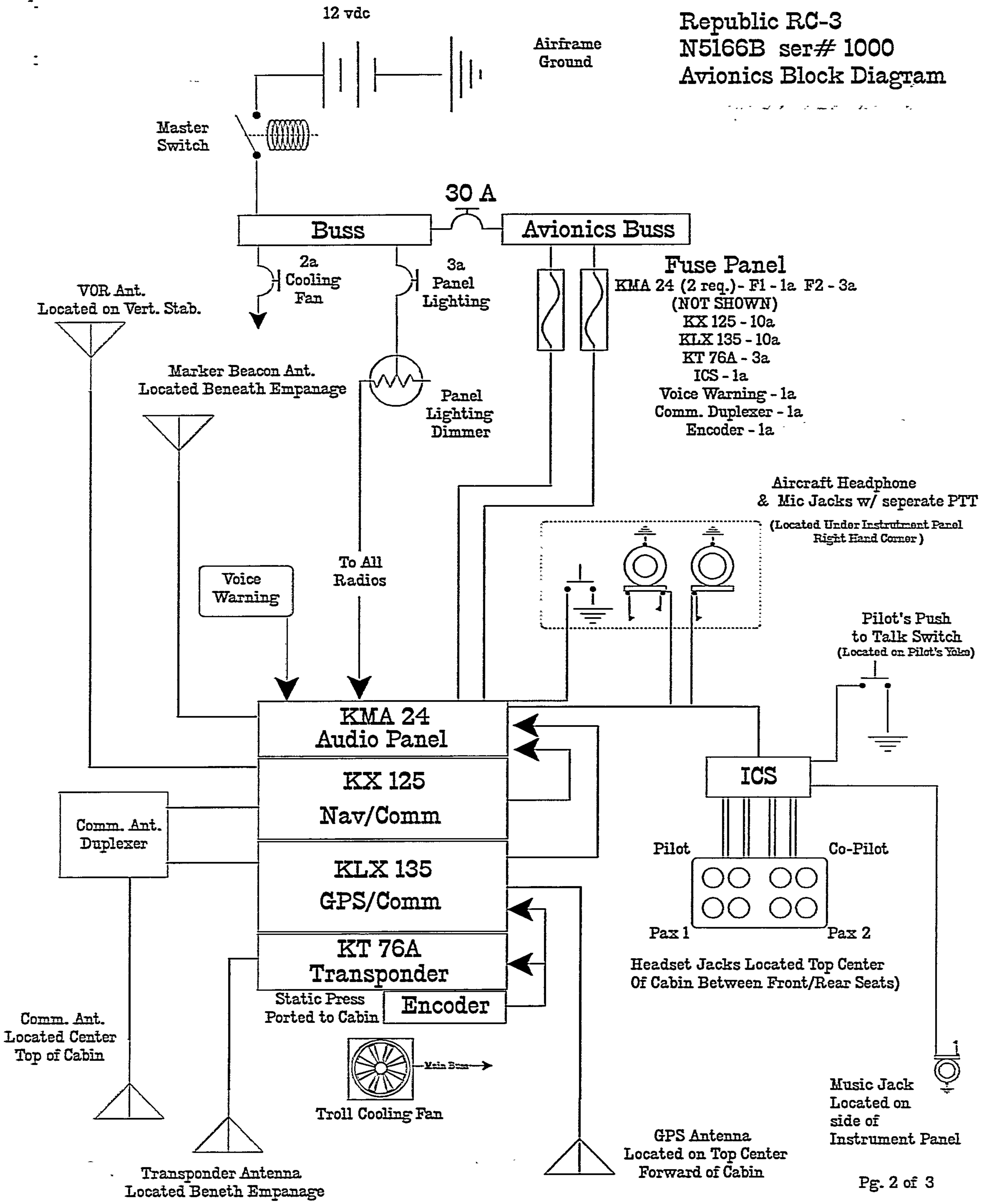
2. Description: Installed Troll Avionics, Inc. multi-port cooling fan, part# FN-200 to avionics support structure behind instrument panel with four (4) AN526-1032 screws and AN365 nuts. Cooling fan is fused through a 2 amp circuit breaker on main aircraft buss. Fan is ducted to KX-125 and KX-135 with Aeroduct CAT -2 flexible ducting. All wire used is MIL-W-22759/16 18 awg. All work done in accordance with Troll Avionics installation instruction sheet part# 2000004 rev. C, AC 43.13 1A, Ch. 11, section 2, para.424, 429, section 3, para. 442, 443, 445 thru 451, fig. 11.7a, section 7, para. 514 thru 520.
3. Control, operation information: None
4. Servicing information: None
5. Maintenance instructions: Must be inspected annually in accordance with FAR 43 appendix D.
6. Trouble shooting information: None
7. Removal and replacement information: None
8. Diagrams: None
9. Special inspection requirements: None
10. Application of protective treatments: N/A
11. Data: None
12. List of special tools: None
13. For commuter category aircraft: N/A
14. Recommended overhaul periods: No additional overhaul time limitations
15. Airworthiness limitation section: No additional airworthiness limitations
16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA form 337

Pg. 1 of 3

Additional Sheets Are Attached

\*U.S.GPO:1994-568-012/00019

Republic RC-3  
N5166B ser# 1000  
Avionics Block Diagram



9-20-99

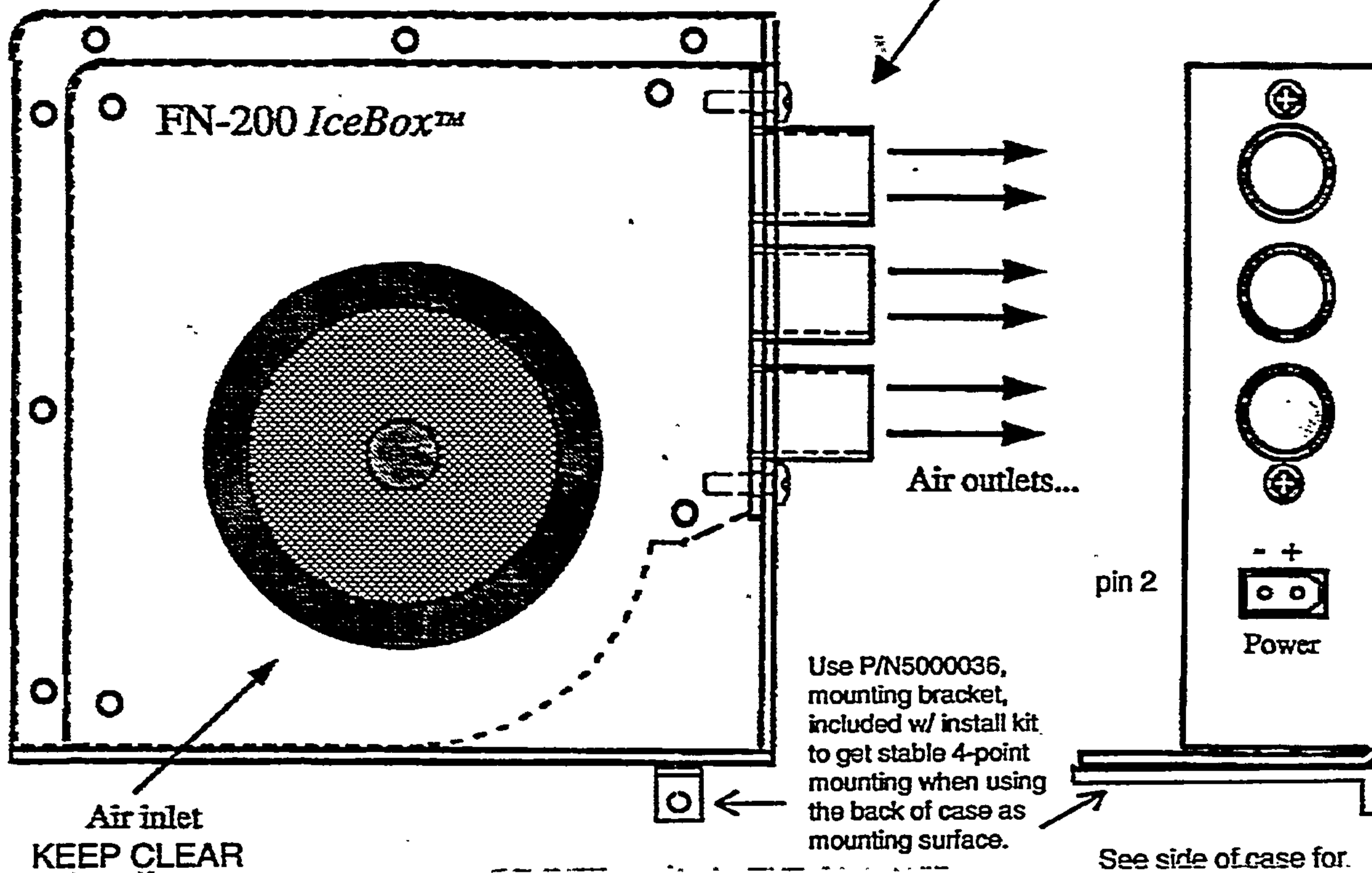


**NEW, IMPROVED MOUNTING SCHEME!!**

**NOTE:**  
Install Caplug™  
on unused air outlets

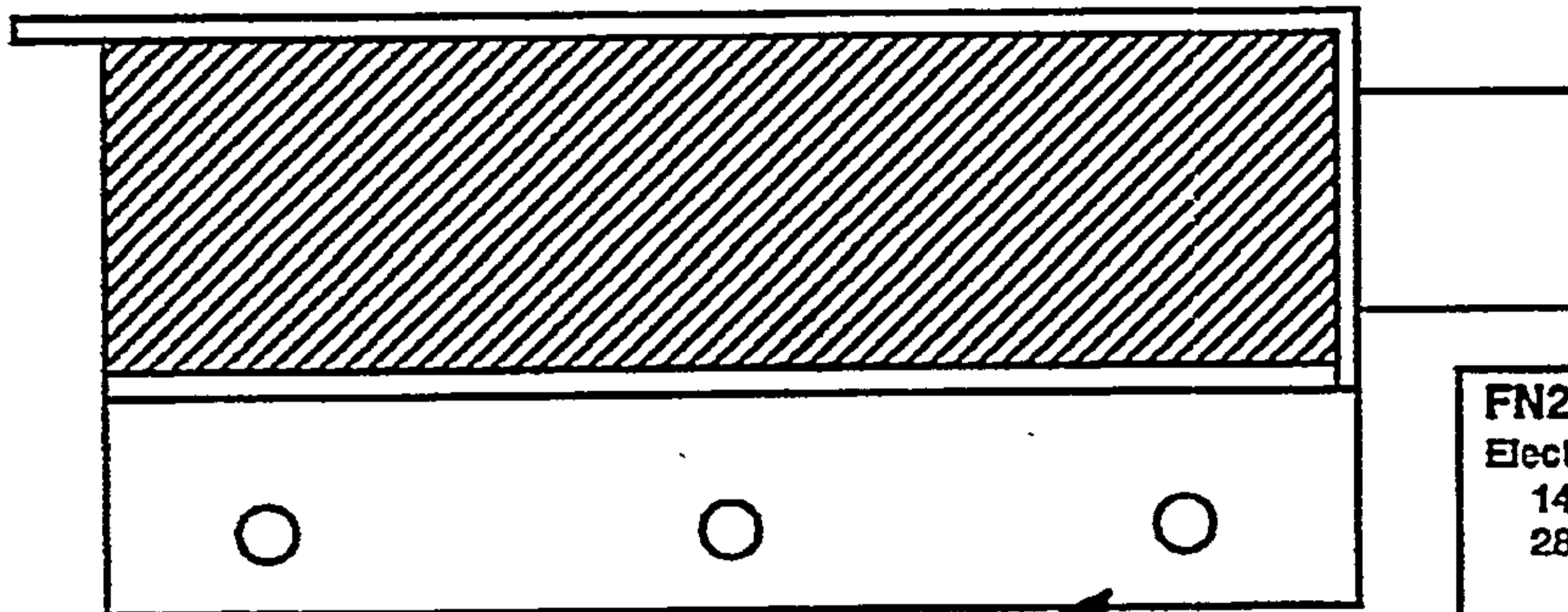
P/N 2000004 Rev C

PREFERRED MOUNTING SURFACE →



**FN-200 IceBox™ Multi-Port Cooling Fan Installation Detail**

80% actual size



Attach (-) lead from power connector (airframe ground) to case at any hole location on the mounting flange or bracket.

**Power Connector:**

Pin 1: A+  
Pin 2: Ground

**Wire Size:**

20A

**Circuit Breaker:**

14v - 2 amp  
28v - 1 amp

**FN200 Specifications:**

**Electrical:**

14 VDC (FN200/14V), 1.00 A nom.  
28 VDC (FN200/28V), 500 mA nom.

Voltage may vary ± 20%. In event of mechanical fan stop, current will limit at 2A & 1A respectively and will auto-restart.

**Mechanical :**

5.0" H x 5.0"W x 2.0"D  
Weight: 1.2 lbs  
Ports: 3 outlet ports for 5/8" CAT type hose attachment.

**Nominal airflow:**

In Free-air: 7.0 cfm x 3 ports  
@ .4" H<sub>2</sub>O: 5.0 cfm x 3 ports

**Reliability:**

MTBF: 15000 hrs @ 40° C



3481 W. Fifth St. Suite 108 Oxnard, Ca. 93030  
805-382-8385 Fax 805-382-8390

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9-20-99