

F. Atlee Dodge Aircraft Services, LLC.

P O Box 190409 * Anchorage, Alaska 99519-0409

Phone: (907) 344-1755 * Fax: (907) 344-6720

FORWARD

Thank you for purchasing F. Atlee Dodge Aircraft Services, LLC. Cessna Jump Seats. The installation instructions are a guideline to help assist your installation. As always over the years customers have offered constructive criticism. So before the installation starts I shall offer some highlights to assist you.

- 1 If you are not familiar with aviation hand tools, procedures or practices please retain a Licensed Airframe and Power Plant Mechanic.
- 2 Please Take Note: Any installation using F. Atlee Dodge seats in Cessna Aircraft, the AFT door post located at **Fuselage Station 65.33** has fuel lines routed inside the former. **EXTREME** care should be taken to avoid drilling holes in fuel lines when attaching the forward section of the slide rail and gusset.
- 3 Each airframe can have a slight variance in dimensions and rivet patterns. With that said our Dimensions for seat elevation are not etched in stone!! On occasions slight modifications to the slide rails & supporting components are necessary.
- 4 Aircraft with float installation kits installed, some rivets might have to be removed & reinstalled with counter sunk rivets to help facilitate the seat installation.
- 5 **Do Not under any circumstances remove any structural member of the aircraft such as stringers, stiffeners, center seat belt support structures or any previously approved repair or alteration!!**

If you have any further questions or comments or critiques please do not hesitate to call.

Respectfully,

Steve Kracke
General Manager

United States of America
Department of Transportation—Federal Aviation Administration
Supplemental Type Certificate

Number SA02008AK

This certificate, issued to F. Atlee Dodge
P. O. Box 190409
Anchorage, Alaska 99519-0409

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

Regulations:

Original Product—Type Certificate Number: *

Make: *

Model: *

*See attached F. Atlee Dodge Aircraft
Services, Inc., Approved Model List for
STC No. SA02008AK dated December 21, 1993,
or later FAA approved revision for list of
approved airplane models and applicable
airworthiness regulations.

Description of Type Design Change:

Fabrication and installation of F. Atlee Dodge Model 3187 left-hand or right-hand
removable folding jump seat; or both, in accordance with F. Atlee Dodge Aircraft
Services, Inc., Master Data List No. 3187 dated October 28, 1993, or later FAA
approved revision.

Limitations and Conditions: The approval of this change in type design applies to the
basic aircraft models listed on F. Atlee Dodge Aircraft Services, Inc., Approved Model
List for STC No. SA02008AK dated December 21, 1993, or later FAA approved revision,
only. This approval should not be extended to other aircraft of these models on which
other previously approved modifications are incorporated unless it is determined by
the installer that the modifications will introduce no adverse effect on the
airworthiness of such aircraft. This determination should include consideration of
significant changes in weight distribution.

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

Date of application: October 21, 1985

Date received:

Date of issuance: December 21, 1993

Date amended:



By direction of the Administrator

Robert L. Miller

Robert L. Miller, (Signature) Manager
Anchorage 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.

IS AUTHORIZED
TO INSTALL STC
ON A MODEL
N S/N
AUTHORIZED BY F. ATLEE DODGE
SIGNATURE
(SIGNATURE MUST BE SIGNED IN GREEN INK
AND HAVE RAISED SEAL)

F. Atlee Dodge Aircraft Services
P. O. Box 190409
Anchorage, AK 99519

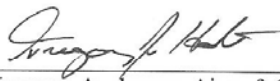
Amendment Level: 7
Date: July 26, 2005
Page 1 of 1

FAA Approved Model List (AML) No. SA02008AK
for
Installation of F. Atlee Dodge Aircraft Services, Inc.
Model 3187 Folding Jump Seat

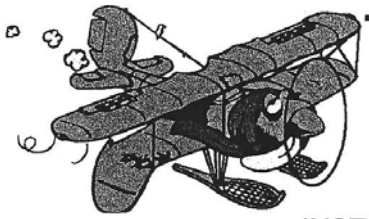
Aircraft Make and Model Designation	Original Type Certificate Number	Certification Basis
Cessna		
170, 170A	A-799	CAR 03
170B	A-799	CAR 3
172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L, 172M, 172N, 172P, 172Q	3A12	CAR 3
172R, 172S	3A12	14 CFR, part 23
175, 175A, 175B, 175C	3A17	CAR 3
180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K	5A6	CAR 3
182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182S, 182T, 182K, 182L, 182M, 182N, 182P, 182Q, 182R	3A13	CAR 3
185, 185A, 185B, 185C, 185D, 185E, A185E, A185F	3A24	CAR 3

END

FAA APPROVED:


Manager, Anchorage Aircraft Certification Office
Federal Aviation Administration
Anchorage, Alaska

Approval Date: August 5, 2005



F. Adlee Dodge Aircraft Services, LLC.

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Instruction Manual 3187-IM

Revision B, July 30, 2005

Page 1 of 2

INSTALLATION INSTRUCTIONS FOR CESSNA 170, 172, 175, 180, 182, 185

Installation of one R.H. or one L.H.
or both is permissible under STC

- 1 Remove the rear or center seat, as applicable, seat belts and carpet. Remove access panels in the floor just aft of Sta. 65.33 & just forward of Sta. 90 (Sta. 92 for Models 182E & subsequent 182's).
- 2 Remove the side paneling behind the main cabin door and below the window, and remove any trim necessary to gain access to the bulkhead at Sta. 65.33 and Sta. 90 (Sta. 92 for Models 182E and subsequent 182's).
- 3 Install the Slide Rail and Gussets as described on Drawing No. 3187-I, Sheet 1 of 4. Before any drilling is done it is recommended that you test fit the seat to insure correct elevation of slide rail for seat configuration.
NOTE: As indicated on the drawing, it is important to countersink the slide rail to the full depth of the screw head; failure to do so will cause the seat to hang up when sliding in the rail.
NOTE: On C182E and later models, slide rail might need to be trimmed.
- 4 Install the Support Bracket as described on Drawing No. 3187-I, sheet 2 of 4.
NOTE: On C182E and later Models P/N 3187-40 & -45 are deleted use P/N 3187-47 L&R. See drawing 3187-47I sheet 1 of 1.
- 5 After installation of Support Bracket, remove the slide rail and reinstall the side paneling. Refit as required. Trim the paneling in the areas where the slide rail contacts the gussets. Now reinstall the slide rail over the paneling using the specified hardware.
- 6 Install the Seat Track and Angle in all aircraft (except those identified in the note below) as described on Drawing No. 3187-I, sheet 3 of 4. On C182E and later Models install track on seat and slide seat on to slide rail previously installed. Align track on floor so seat moves freely. Once seat track is located on floor proceed with instructions.
NOTE: On C182E and later models, floor track might need to be trimmed and track should not over lap skin at STA.65.33
- 6A NOTE: Instruction 6A applies only to Cessna 180 J&K S/N 18052490 & 18052621 through 18053203, and to Cessna A185F S/N 18502839 through 18504448, with the center seat belt mounting assy P/N 0711843-1 installed. Install the seat track & angle in these aircraft as described on Drawing No. 3187-I, sheet 3A of 4.

Installation of the -43 angle must have a short section removed. Measure the distance from under the floor from Sta. 65.33 to the Seat Belt Mount Assy. Transfer the measurement to the -43 angle. Remove the end of the -43 angle with milled step. Scaf and angle app. 30.degree Reprime bare metal.

NOTE: On C182E and later models the milled step goes forward.

The following two notes apply to both instructions 6 & 6A.

NOTE: As indicated on the drawing, it is important to countersink the track to the full depth of the screw head; failure to do so will cause the set to hang up in the track.

NOTE: Read and Comply with Note 6 on sheet 3, Note 5 on sheet 3A: variations in depth of countersinks, hardware tolerances, and other factors can produce variations in thread exposure under the floor - be sure you torque the nut against the floor, not against the screw shank.

Continued.....

- 7 If two seats are being installed, repeat steps 2 through 6 for the other side.
- 8 Remove all metal chips and debris from under and above the floor, then reinstall access covers.
- 9 Reinstall carpet and refit as required.
- 10 Install the Seat (s) and Belts as described on Drawing No. 3187-I, sheet 4 of 4.
NOTE: On C182E and later Models use aircraft Manufacture Seat Belt Attach Mounts.
- 11 Complete FAA Form 337 in duplicate. Reference this STC. State whether one or two seats were installed.
Make proper entries in Airframe Logbook and Equipment List.

Reference: FAR 43.9 and Appendix B

- 12 Compute new empty Weight and Balance. Use actual weight change. C.G. location of installed Folding Seats is nearly the same as for the original bench seat (Sta 72 for all applicable models).
Folding Seat weight (complete Kit) is 8lbs. With upholstery, 6.5 lbs. without upholstery. Insert the new Weight and Balance in the Equipment List.

KIT PARTS LIST:

Quantities Listed for one seat kit, Right or Left.

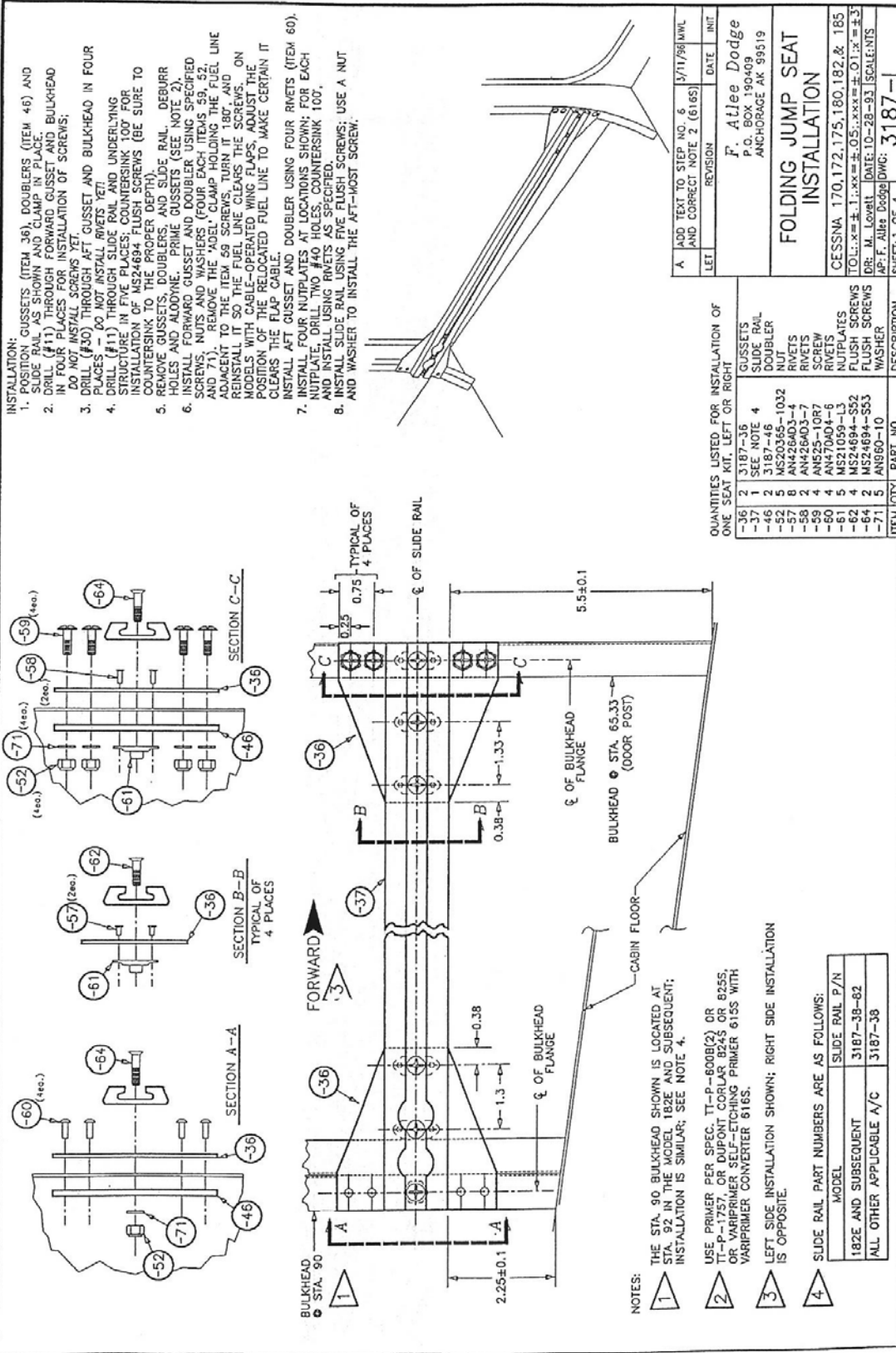
Item No.	Qty.	Part No.	Description
1	1	3187-1	Seat Assembly, Left
	or	3187-2	Seat Assembly, Right
36	2	3187-36	Gusset
37	1	3187-37*	Slide Rail
38	1	3187-38*	Seat Track
39	2	10730**	Tie-Down Ring (Brownline)
40	1	3187-40R/L	Support Bracket
43	1	3187-43R/L*	Angle
44	2	3187-44	Fitting
45	1	3187-45R/L	Bracket
46	2	3187-46	Doubler
47	2	3187-47R/L*	Support Bracket
51	15	AN960-10L	Washer
52	20	MS20365-1032	Nut
57	8	AN426AD3-4	Rivet
58	2	AN426AD3-7	Rivet
59	4	AN525-10R7	Screw
60	4	AN470AD4-6	Rivet
61	5	MS21059L-3	Nut plate
62	19	MS24694-S52	Flush Screw
63	12	CR3213-4-2	Blind Rivet (Cherrymax)
64	2	MS24694-S53	Flush Screw ***
65	1	MS24694-S100	Flush Screw****
66	3	AN960-416L	Washer
67	3	MS20365-428	Nut
68	2	AN4-5A	Bolt
69	2	FDA1677-IM	End Fitting (Davis)
70	1	AN960-416	Washer
71	19	AN960-10L	Washer
72	2	MS24694-S52	Flush Screw ***
73	1	MS24694-S99	Flush Screw ****

* For Models 182E and subsequent, Refer to Drawing No. 3187-47I

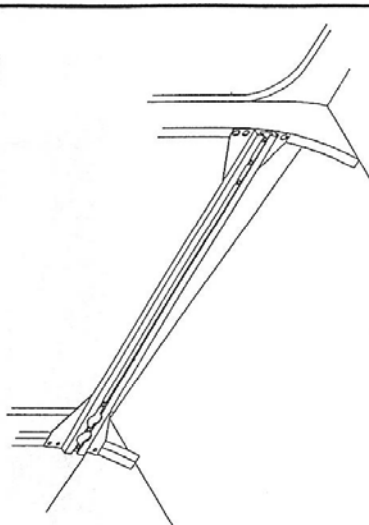
** Alternate parts may be supplied; see Drawing No. 3187-I, sheet 4 of 4

*** 72 used instead of 64 for Models 180J, 180K & A185F with P/N 0711843-1.

**** 73 used instead of 65 for Models 180J, 180K & A185F with P/N 0711843-1.



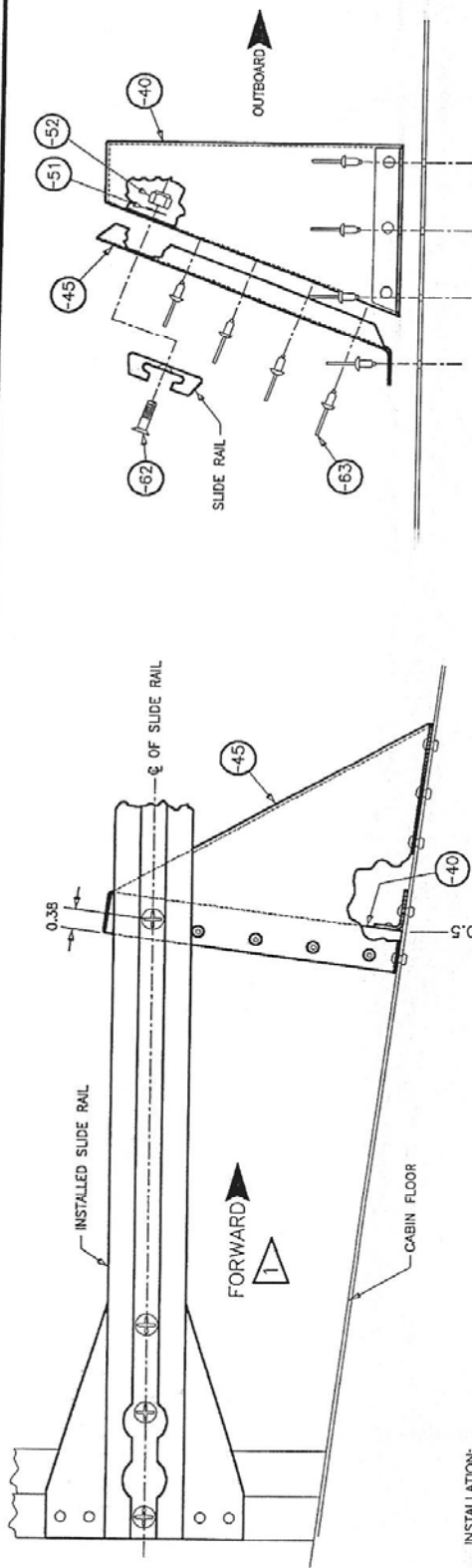
- INSTALLATION:**
- POSITION GUSSETS (ITEM 36), DOUBLERS (ITEM 46) AND SLIDE RAIL AS SHOWN AND CLAMP IN PLACE.
 - DRILL (#11) THROUGH FORWARD GUSSET AND BULKHEAD IN FOUR PLACES FOR INSTALLATION OF SCREWS;
 - DO NOT INSTALL SCREWS YET.
 - PLACES (#11) THROUGH SLIDE RAIL AND UNDERLYING STRUCTURE IN FIVE PLACES; COUNTERSINK 100° FOR INSTALLATION OF MS24694 FLUSH SCREWS (BE SURE TO COUNTERSINK TO THE PROPER DEPTH).
 - REMOVE GUSSETS, DOUBLERS AND SLIDE RAIL. DEBURR HOLES AND ADOYNE PRIME GUSSETS (SEE NOTE 2).
 - INSTALL FORWARD GUSSET AND DOUBLER USING SPECIFIED SCREWS, NUTS AND WASHERS (FOUR EACH ITEMS 59-52 AND 71). REMOVE THE 'ADEL' CLAMP HOLDING THE FUEL LINE ADJACENT TO THE ITEM 59 SCREWS, TURN IT 180°, AND REINSTALL IT SO THE FUEL LINE CLEARS THE SCREWS. ON MODELS WITH CABLE-OPERATED WING FLAPS, ADJUST THE POSITION OF THE RELOCATED FUEL LINE TO MAKE CERTAIN IT CLEARS THE FLAP CABLE.
 - INSTALL AFT GUSSET AND DOUBLER USING FOUR RIVETS (ITEM 60), NUTPLATE, DRILL TWO #40 HOLES, COUNTERSINK 100°, AND INSTALL USING RIVETS AS SPECIFIED.
 - INSTALL SLIDE RAIL USING FIVE FLUSH SCREWS; USE A NUT AND WASHER TO INSTALL THE AFT-MOST SCREW.



F. Atlee Dodge
P.O. BOX 190409
ANCHORAGE AK 99519

**FOLDING JUMP SEAT
INSTALLATION**

CESSNA 170,172,175,180,182 & 185
TOL: x=±1.1; y=±0.5; z=±0.1; x=±3
DR: M. Lowitt DATE: 10-28-93 SCALE: 1/8"
AP: F. Atlee Dodge DMC: 3187-1
SHEET 1 OF 4



- INSTALLATION:
1. POSITION SUPPORT BRACKET (P/N 3187-40L OR 3187-40R, AS APPLICABLE) AT FUSELAGE STA. 80, BETWEEN THE SLIDE RAIL AND THE FUSELAGE WALL, AS SHOWN. CLAMP THE SUPPORT BRACKET AT ITS TOP INBOARD FLANGE TO THE SLIDE RAIL.
 2. DRILL (#30) THROUGH THE THREE PILOTED HOLES IN THE SUPPORT BRACKET BOTTOM ANGLE, THROUGH THE CABIN FLOOR. INSTALL THREE CR3213-4-2 RIVETS.
 3. REMOVE CLAMP AND POSITION BRACKET (P/N 3187-45L OR 3187-45R, AS APPLICABLE) BETWEEN SLIDE RAIL AND INSTALLED SUPPORT BRACKET, AS SHOWN. CLAMP THE -45 BRACKET TO THE CENTERLINE OF THE SLIDE RAIL. DRILL (#11) THROUGH THE SLIDE RAIL (ON CENTERLINE) AND BOTH BRACKETS. COUNTERSINK THE SLIDE RAIL 100° FOR SUITABLE CRACK TO PROPER DEPTH) THEN INSTALL WS24694-52 SCREW, AN960-10L WASHER, AND MS20365-1032 NUT.
 4. DRILL (#30) THROUGH 9 PILOTED HOLES IN -45 BRACKET, THROUGH SUPPORT BRACKET INBOARD FLANGE AND CABIN FLOOR. INSTALL 9 CR3213-4-2 RIVETS.

NOTES:

1. LEFT SIDE INSTALLATION (SHOWN) USES ONE P/N 3187-40L AND ONE P/N 3187-45L. RIGHT SIDE INSTALLATION (NOT SHOWN) IS OPPOSITE AND USES ONE P/N 3187-40R AND ONE P/N 3187-45R.

QUANTITIES LISTED FOR INSTALLATION OF ONE SEAT KIT. LEFT OR RIGHT; SEE NOTE 1

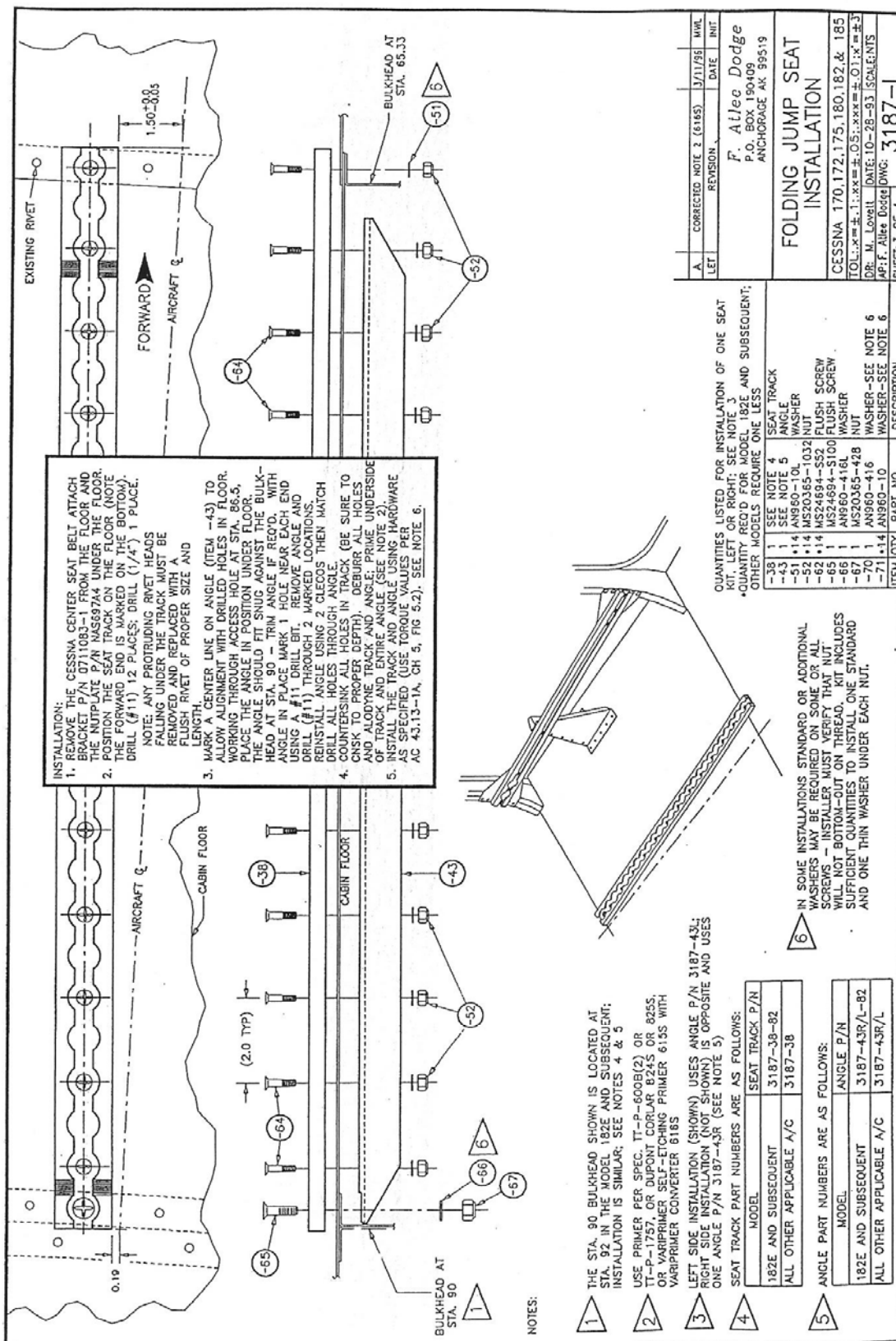
ITEM	QTY	PART NO.	DESCRIPTION
-40	1	3187-40R/L	SUPPORT BRACKET
-45	1	3187-45R/L	BRACKET
-51	1	AN960-10L	WASHER
-52	1	MS20365-1032	NUT
-62	1	WS24694-52	FLUSH SCREWS
-63	12	CR3213-4-2	BLIND RIVET (CHERRYMAX)

FOLDING JUMP SEAT
INSTALLATION

CESSNA 170,172,175,180,182 & 185
TOL: .001 IN. MAX. DATE: 6-30-93 SCALE: NTS
DR: M. Lovell
AP: F. Atlee Dodge
SHEET 2 OF 4

LET REVISION DATE INIT
F. Atlee Dodge
P.O. BOX 190409
ANCHORAGE AK 99519

3187-1

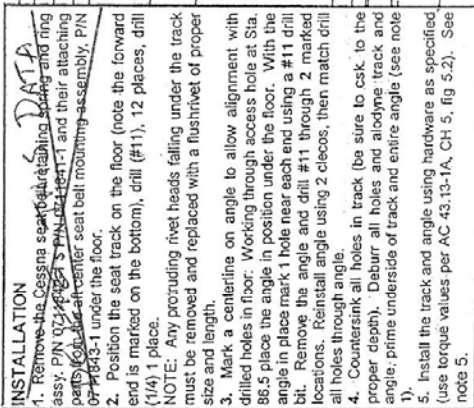


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P.O. BOX 190409
ANCHORAGE AK 99519

FOLDING JUMP SEAT INSTALLATION

CESSNA 170,172,175,180,182,& 185
TOL: x = ±.1; xx = ±.05; xxx = ±.01; x = ±.3
DR: M. Lovell DATE: 10-28-93 SCALE: NTS
AP: F. Allee Dodge DWG: 3187-1

SHEET 3 OF 4



- 1 USE PRIMER PER SPEC. TT-P-600B(2) OR TT-P-1757, OR DUPONT CORLAR 824S OR 825S, OR VARIPRIMER SELF-ETCHING PRIMER 615S WITH VARIPRIMER CONVERTER 615S.
- 2 LEFT SIDE INSTALLATION (SHOWN) USES ANGLE PIN 3187-43L, RIGHT SIDE INSTALLATION (NOT SHOWN) IS OPPOSITE AND USES ONE ANGLE P/N 3187-43R (SEE NOTE 4)
- 3 SEAT TRACK P/N 3187-38
- 4 ANGLE PIN 3187-43 L/R
- 5 IN SOME INSTALLATIONS STANDARD OR ADDITIONAL WASHERS MAY BE REQUIRED ON SOME OR ALL SCREWS — INSTALLER MUST VERIFY THAT NUT WILL NOT BOTTOM-OUT ON THREAD. KIT INCLUDES SUFFICIENT QUANTITIES TO INSTALL ONE STANDARD AND ONE THIN WASHER UNDER EACH UNIT.

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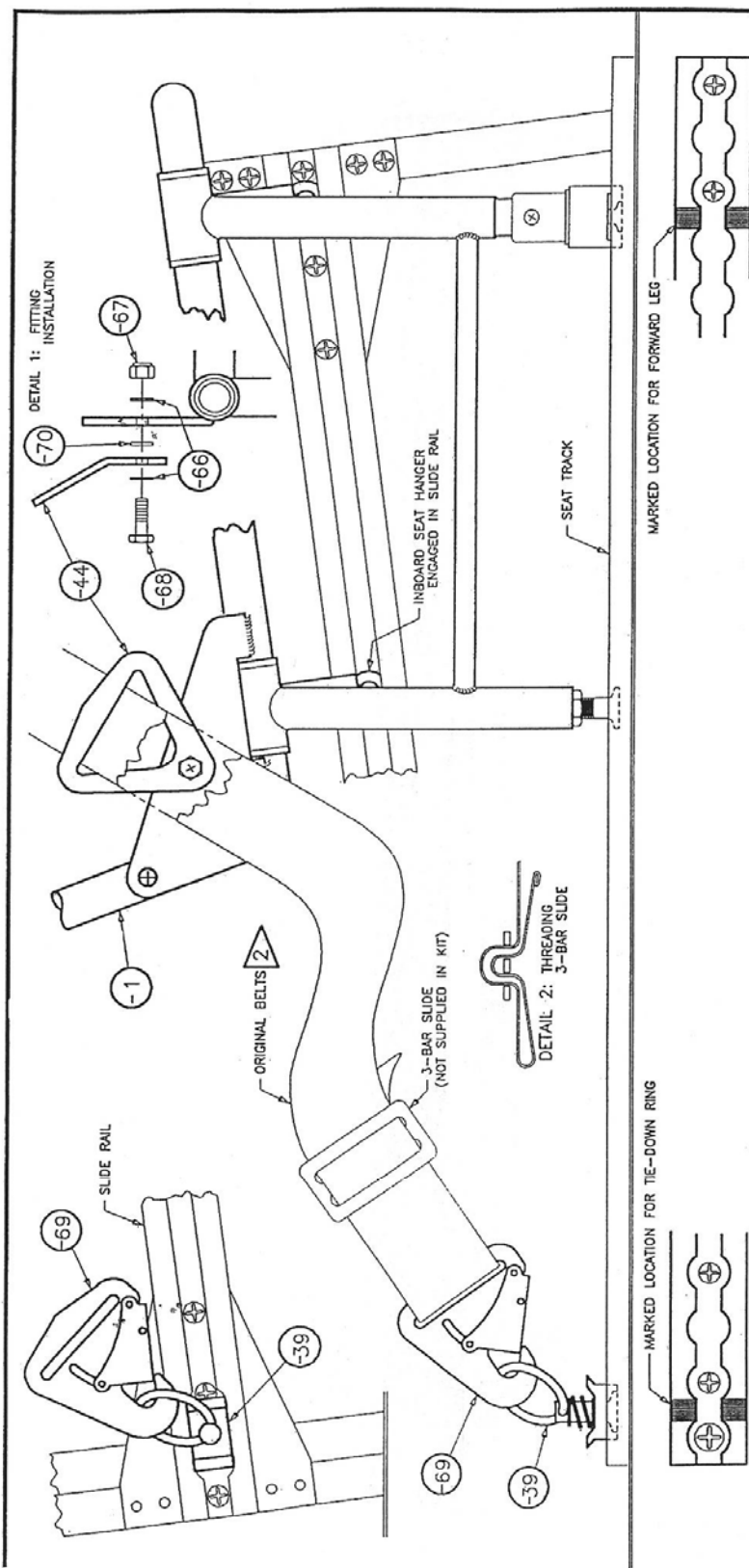
FOLDING JUMP SEAT INSTALLATION

Cessna 180J, 180K, A185F

$$\text{FOI } \lambda = \pm 1, \quad \lambda \lambda = \pm 0.5, \quad \lambda \lambda \lambda = \pm 0.1, \quad \lambda^* = \pm \lambda^*$$

Date 7.7.97

Sheet 3 of 4



- INSTALLATION:
1. INSTALL SEAT: SLIDE OUT/D. SEAT HANGERS INTO SLIDE RAIL; ENGAGE IN/D. AFT LEG IN SEAT TRACK; LOCK IN/D. FORWARD LEG FITTING INTO SEAT TRACK AT MARKED LOCATION. ADJUST AFT LEG LENGTH BY TURNING THE SCREW. TORQUE AFT LEG SCREW TO 95 IN.-LB. TORQUE IN/D. SUIT TO 95 IN.-LB.
 2. INSTALL 2 FITTINGS P/N 3187-44 ON SEAT PER DETAIL 1.
 3. INSTALL 1 TIE-DOWN RING (ITEM -39) IN THE SEAT TRACK AT THE MARKED LOCATION (AFT END). INSTALL 1 TIE-DOWN RING IN THE SLIDE RAIL AT THE AFT END.
 4. REPLACE END FITTINGS ON ORIGINAL SEAT BELTS WITH END FITTING P/N FDA1677-1M (SUPPLIED IN KIT) ON SEAT BELTS. SEE DETAIL 2.
 5. REPLACE BELTS THROUGH FITTINGS P/N 3187-44 ON SEAT AND ATTACH TO TIE-DOWN RINGS. SEE NOTE 2.

NOTES:

1. LEFT SIDE INSTALLATION (SHOWN) USES SEAT ASSY P/N 3187-1; RIGHT SIDE INSTALLATION (NOT SHOWN) IS OPPOSITE AND USES SEAT ASSY P/N 3187-2
2. SEAT BELTS MUST COMPLY WITH TSO-C221 OR LATER FAA-APPROVED REVISION AND MUST HAVE A SEWED-ON DATA PATCH

QUANTITIES LISTED FOR INSTALLATION OF ONE SEAT KIT, LEFT OR RIGHT; SEE NOTE 1

ITEM	QTY	PART NO.	DESCRIPTION
-39	2	10730	SEAT ASSY
-44	2	3189-44	(BROWNLINER) OR ALTERNATE: 40340-20 or 40340-24 (ANGRA)
-65	4	AN860-416L	FITTING
-67	2	MS20365-428	WASHER
-68	2	ANA-5A	NUT
-69	2	FDA1677-1M	BOLT
-70	2	AN960-416	END FITTING (DAVIS P/N) WASHER

A	AMEND NOTE 2 (TSO REV)	3/11/96	MWL
LET	REVISION	DATE	INIT
F. Atlee Dodge P.O. BOX 190409 ANCHORAGE AK 99519			
FOLDING JUMP SEAT INSTALLATION			
CESSNA 170, 172, 175, 180, 182, & 185			
TOL: .X = ±.1; .XX = ±.05; .XXX = ±.01; .X = ±.3			
DR: M. Lovell DATE: 10-28-93 ISCALENTS			
AP: F. Atlee Dodge DWG: 3187-1			
SHEET: 4 OF 4			

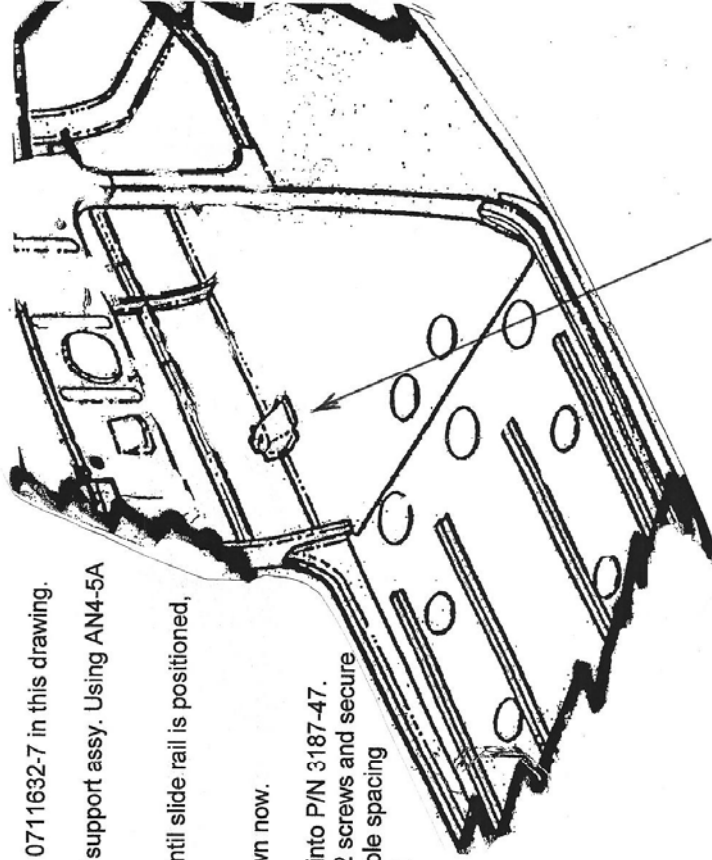


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Cessna C182E and Later Supplement Installation Drawings For P/N 3187-47 L & R

Document No: 3187-471
Revision: A
Date: August 3, 2005
Sheet 1 of 1

1. Locate support assy. For Cessna rear seat P/N 0711632-7 in this drawing.
2. Position support bracket P/N 3187-47 on top of support assy. Using AN4-5A bolt supplied in kit.
3. **DO NOT TIGHTEN DOWN AT THIS TIME!!!!** Until slide rail is positioned, trimmed and installed.
4. Support bracket P/N 3187-47 can be bolted down now.
5. 2 Holes need to be drilled through the slide rail into P/N 3187-47. Counter sink the holes to accept 2 MS2492-S52 screws and secure rail to bracket using hardware provided in kit. Hole spacing in slide rail should be approximately 1" C/C with 1/2" edge distance on support bracket 3187-47.



**CESSNA P/N 0711632-7
REAR SEAT SUPPORT BRACKET MOUNT**