## Seat Rails and Seat Parts



FAA-PMA Approved

## Seat Rails for Cessna Aircraft

- Carefully engineered with many improvements
- Added strength and longer life
- Anodized for corrosion and wear resistance
- Easier installation
- Full interchangeability with the original Cessna parts

## New! Cardinal Rails Now Approved!

### Pilot Holes Only, for Precise Installation

McFarlane seat rails have only pilot holes drilled in the rail base allowing the installer to exactly match the aircraft floor rivet pattern. McFarlane discovered while installing and developing our replacement seat rails that the seat rail attachment hole pattern was not consistent from aircraft to aircraft. Even small inconsistencies in the hole locations in the aircraft floor make installation of new seat rails very difficult. For this reason, all McFarlane seat rails have only a few smaller pilot attachment holes drilled at the factory. This allows the installer to precisely locate the attachment holes to match the holes in the aircraft floor. All special sized or machined attachment holes are factory machined to finish dimensions. It is necessary to install all required fasteners when seat rails are installed.

#### More Material in the Right Places

After studying countless worn and failed seat rails McFarlane's rails were designed with 15% more metal in critical areas. The result is more crack resistance, durability, strength and longer life.

#### Installation Tip:

The aircraft floor is subject to corrosion from moisture under the seat rails. Be sure to remove and treat any corrosion before installing the new seat rails.



McFarlane Seat Rail	Cessna Seat Rail

#### Inboard RH Model Serial Number Inboard LH Outboard LH Outboard RH Template 150A,B,C,D,E,F\* 15059019 thru 15063059 MC0411545-2 MC0411545-1 (H) MC0411545-1 (H) MC0411545-2 F150F\* F1500001 thru F1500029 MC0411545-2 MC0411545-1 (H) MC0411545-1 (H) MC0411545-2 150F\* 15063060 thru 15063735 MC0411545-4 MC0411545-3 (H) MC0411545-3 (H) MC0411545-4 F150F F1500030 thru F1500067 MC0411545-4 MC0411545-3 (H) MC0411545-3 (H) MC0411545-4 150F\*,G,H,J,K,L\* 15063736 thru 15072628 MC0410219-1 (H) MC0410219-2 MC0410219-2 MC0410219-1 (H) A150K.L\* A1500001 thru A1500276 MC0410219-2 MC0410219-1 (H) MC0410219-1 (H) MC0410219-2 F150G,H,J,K,L\* F1500068 thru F1500738 MC0410219-2 MC0410219-1 (H) MC0410219-1 (H) MC0410219-2 FA1500001 thru FA1500120 MC0410219-1 (H) MC0410219-1 (H) MC0410219-2 FA150K,L\* MC0410219-2 FRA150L\* FRA1500121 thru FRA1500166 MC0410219-2 MC0410219-1 (H) MC0410219-1 (H) MC0410219-2 150L\* 15072629 thru 15073658 MC0410230-2 MC0410230-3 (H) MC0410230-2 MC0410230-3 A150L\* A15000277 thru A15000342 MC0410230-2 MC0410230-3 (H) MC0410230-2 MC0410230-3 F150L\* F15000739 thru F15000863 MC0410230-2 MC0410230-3 (H) MC0410230-2 MC0410230-3 150L\*,150M 15073659 thru 15079405 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) A150L\*,M A1500343 thru A1500734 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) F150L\*,M F1500864 thru F1501428 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) FRA150L\*,M FRA1500167 thru FRA1500336 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) 152 15279406 thru 15286033 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) A152 A1520735 thru A1521049 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) F152 F15201429 thru F15201980 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) FA1520337 thru FA1520425 FA152 MC0410235-6 (H) MC0410235-1 MC0410235-2 MC0410235-6 (H) SRTEM1 170, 170A,B 18000 thru 27169 MC0511000-14 MC0511000-15 (H) MC0511000-14 MC0511000-15 (H) 28000 thru 17249544 SRTEM1 172, 172A,B,C MC0511293-1 MC0511293-3 (H) MC0511293-4 MC0511293-2 (H) MC0511240-4 MC0511240-6 (H) 172D.E 17249545 thru 17251822 MC0511240-3 SRTEM2 MC0511240-2 (H) F172D.E F1720001 thru F1720085 MC0511240-4 MC0511240-2 (H) MC0511240-3 MC0511240-6 (H) SRTEM2 FP1720001 thru FP1720003 MC0511240-2 (H) MC0511240-6 (H) SRTEM2 MC0511240-4 MC0511240-3 FP172 172F,G,H,I,K\* 17251823 thru 17258656 MC0511240-5 MC0511240-2 (H) MC0511240-3 MC0511240-6 (H) SRTEM2 MC0511240-6 (H) F172F.G.H\* F17200086 thru F17200739 MC0511240-5 MC0511240-2 (H) MC0511240-3 SRTFM2 FR172E,F,G\* FR17200001 thru FR17200190 MC0511240-5 MC0511240-2 (H) MC0511240-3 MC0511240-6 (H) SRTEM2 MC0511240-7 (H) 17258657 thru 17259223 MC0511240-9 MC0511240-8 MC0511240-10 (H) SRTEM2 172K\* F172H\* F17200740 thru F17200754 MC0511240-9 MC0511240-7 (H) MC0511240-8 MC0511240-10 (H) SRTEM2 FR172G\* MC0511240-9 MC0511240-7 (H) MC0511240-8 MC0511240-10 (H) SRTEM2 FR17200191 thru FR17200225 MC0511240-15 MC0511240-11 (H) MC0511240-12 MC0511240-14 (H) SRTEM2 172L 17259224 thru 17260758 F172K.L F17200755 thru F17200904 MC0511240-15 MC0511240-11 (H) MC0511240-12 MC0511240-14 (H) SRTEM2 FR172H FR17200226 thru FR17200350 MC0511240-15 MC0511240-11 (H) MC0511240-12 MC0511240-14 (H) SRTEM2 172M.N\* 17260759 thru 17272884 MC0511243-4 (H) MC0511243-5 (H) MC0511243-6 (H) MC0511243-4 (H) SRTEM2 R1722200 thru R1723199 MC0511243-4 (H) MC0511243-5 (H) MC0511243-6 (H) MC0511243-4 (H) SRTEM2 R172K\* F172M,N3 F17200905 thru F17201909 MC0511243-4 (H) MC0511243-5 (H) MC0511243-6 (H) MC0511243-4 (H) SRTEM2 FR172J,K\* FR17200351 thru FR17200655 MC0511243-4 (H) MC0511243-5 (H) MC0511243-6 (H) MC0511243-4 (H) SRTEM2 NOTE: Cessna Parts Manual has the location reversed on P/N 0511243-5 & 0511243-6. The information contained here has been verified to be correct. 172N\*,P\*,Q 17272885 thru 17276516 MC2414002-2 (H) MC2414002-1 (H) MC2414002-2 (H) MC2414002-1 (H) SRTEM2 R172K\* R1723200 thru R1723454 MC2414002-2 (H) MC2414002-1 (H) MC2414002-2 (H) MC2414002-1 (H) SRTEM2 F172N\*,P\* F17201910 thru F17202238 MC2414002-2 (H) MC2414002-1 (H) MC2414002-2 (H) MC2414002-1 (H) SRTEM2 FR172K\* FR17200656 thru FR17200675 MC2414002-2 (H) MC2414002-1 (H) MC2414002-2 (H) MC2414002-1 (H) SRTEM2 172P\* 17276517 thru 17276654 MC0514209-3 (H) MC0514209-1 (H) MC0514209-2 (H) MC0514209-4 (H) SRTEM2 F172P\* F17202239 thru F17202254 MC0514209-3 (H) MC0514209-1 (H) MC0514209-2 (H) MC0514209-4 (H) SRTEM2 R172K\* R1722000 thru R1723199 MC0511243-4 (H) MC0511243-5 (H) MC0511243-6 (H) MC0511243-4 (H) SRTEM2 FR172K\* FR17200591 thru FR17200655 MC0511243-4 (H) MC0511243-5 (H) MC0511243-6 (H) MC0511243-4 (H) SRTEM2 172RG 172RG0001 thru 172RG1191 MC2414002-2 (H) MC2414002-1 (H) MC2414002-2 (H) MC2414002-1 (H) SRTEM2 P17257120 thru P17257188 MC0511240-4 MC0511240-2 (H) MC0511240-3 MC0511240-6 (H) SRTEM2 P172

(H)-These rails have seat adjust holes

Eligibility continued on next page

<sup>\*</sup> Partial model eligibility



## **Seat Rails and Seat Parts**

## **FAA-PMA Approved**

FAA-PIVIA APPRO			ı			
Model	Serial Number	Inboard LH	Outboard LH	Outboard RH	Inboard RH	Template
175	55001 thru 56777	MC0511293-1	MC0511293-3 (H)	MC0511293-4	MC0511293-2 (H)	SRTEM1
175A,B,C	17556778 thru 17557119	MC0511293-1	MC0511293-3 (H)	MC0511293-4	MC0511293-2 (H)	SRTEM1
177,A,B*	17700001 thru 17701636	MC1711015-3 (H)	MC1711015-1 (H)	MC1711015-2 (H)	MC1711015-4 (H)	SRTEM3
177B*	17701637 thru 17702752	MC1711015-9 (H)	MC1711015-7 (H)	MC1711015-8 (H)	MC1711015-10 (H)	SRTEM3
177RG*	177RG0105 thru 177RG01366	MC2011015-9 (H)	MC2011015-5 (H)	MC2011015-10 (H)	MC2011015-8 (H)	SRTEM3
F177RG	F177RG0007 thru F177RG0177	MC2011015-9 (H)	MC2011015-5 (H)	MC2011015-10 (H)	MC2011015-8 (H)	SRTEM3
180, 180A,B,C,D,E,F	30000 thru 18051312	MC0511000-14	MC0511000-15 (H)	MC0511000-14	MC0511000-64 (H)	SRTEM1
180G,H*	18051313 thru 18051490	MC0511000-68	MC0511000-69 (H)	MC0511000-68	MC0511000-70 (H)	SRTEM1
180H*	18051491 thru 18052103	MC0711693-1	MC0711693-2 (H)	MC0711693-1	MC0711693-2 (H)	SRTEM1
180H*	18052104 thru 18052215	MC0711693-1	MC0711693-4 (H)	MC0711693-1	MC0711693-4 (H)	SRTEM1
180H*,J*	18052216 thru 18052500	MC0711693-8	MC0711693-6 (H)	MC0711693-8	MC0711693-6 (H)	SRTEM1
180J*	18052501 thru 18052620	MC0711693-8	MC0711693-7 (H)	MC0711693-8	MC0711693-7 (H)	SRTEM1
180J*,K	18052621 thru 18053203	MC0711693-9 (H)	MC0711693-11 (H)	MC0711693-10 (H)	MC0711693-7 (H)	SRTEM1
182, 182A,B,C,D	33000 thru 18253598	MC0511293-1	MC0511293-3 (H)	MC0511293-4	MC0511293-2 (H)	SRTEM1
182E,F,G,H,J,K,L,M,N*	18253599 thru 18260445	MC0710618-1	MC0710618-5 (H)	MC0710618-4	MC0710618-6 (H)	SRTEM1
182N*,P,Q,R/T182	18260446 thru 18268615	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	SRTEM1
A182J,K,L,M,N	A1820001 thru A1820148	MC0710618-1	MC0710618-5 (H)	MC0710618-4	MC0710618-6 (H)	SRTEM1
F182P,Q	F18200001 thru F18200169	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	SRTEM1
F182RG	FR18200001 thru FR18200070	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	SRTEM1
R182/TR182	R18200001 thru R18202041	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	MC0710658-2 (H)	SRTEM1
185,A,B,C,D*	1850001 thru 1850806	MC0511000-68	MC0511000-69 (H)	MC0511000-68	MC0511000-70 (H)	SRTEM1
185D*,E, A185E*	1850807 thru 18501599	MC0711693-1	MC0711693-2 (H)	MC0711693-1	MC0711693-2 (H)	SRTEM1
A185E*	18501600 thru 18501954	MC0711693-1	MC0711693-4 (H)	MC0711693-1	MC0711693-4 (H)	SRTEM1
A185E*, A185F*	18501955 thru 18502565	MC0711693-8	MC0711693-6 (H)	MC0711693-8	MC0711693-6 (H)	SRTEM1
A185F*	18502566 thru 18502838	MC0711693-8	MC0711693-7 (H)	MC0711693-8	MC0711693-7 (H)	SRTEM1
A185F*	18502839 thru 18504448	MC0711693-9 (H)	MC0711693-11 (H)	MC0711693-10 (H)	MC0711693-7 (H)	SRTEM1
A188B	18800944 thru 18803968T	Left- MC1613423-3 (H)		Right-MC1613423-3 (H)	,	SRTEM1
T188C	T18803307T thru T18803968T	Left- MC1613423-3 (H)		Right-MC1613423-3 (H)		SRTEM1
190, 195	7001 thru 7999	Inboard-MC0311715-4 (H)		Outboard-MC0311715-3	(H)	SRTEM1
190, 195	16000 thru 16183	Inboard-MC0311715-4 (H)		Outboard-MC0311715-3	(H)	SRTEM1
205	2050001 thru 2050480	MC1210408-1	MC1210408-5 (H)	MC1210408-4	MC1210408-6 (H)	SRTEM1
205A	2050481 thru 2050577	MC1210408-1	MC1210408-5 (H)	MC1210408-4	MC1210408-6 (H)	SRTEM1
206	2060001 thru 2060275	MC1210408-1	MC1210408-5 (H)	MC1210408-8	MC1210408-6 (H)	SRTEM1
U206A,B,C,D,E*	U2060276 thru U20601587	MC1210408-1	MC1210408-5 (H)	MC1210408-8	MC1210408-6 (H)	SRTEM1
TU206A,B,C,D,E*	U2060276 thru U20601587	MC1210408-1	MC1210408-5 (H)	MC1210408-8	MC1210408-6 (H)	SRTEM1
P206A,B,C,D,E	P2060001 thru P20600647	MC1210408-1	MC1210408-5 (H)	MC1210408-4	MC1210408-6 (H)	SRTEM1
TP206A,B,C,D,E	P2060002 thru P20600647	MC1210408-1	MC1210408-5 (H)	MC1210408-4	MC1210408-6 (H)	SRTEM1
U206E*,F*	U20601588 thru U20601874	Not available	MC1210408-21 (H)	MC1210408-14	MC1210408-12 (H)	SRTEM1
TU206E*,F*	U20601588 thru U20601874	Not available	MC1210408-21 (H)	MC1210408-14	MC1210408-12 (H)	SRTEM1
U206F*,G*	U20601875 thru U20605309	MC1210408-18 (H)	MC1210408-21 (H)	MC1210408-17 (H)	MC1210408-12 (H)	SRTEM1
TU206F*,G*	U20601875 thru U20605309	MC1210408-18 (H)	MC1210408-21 (H)	MC1210408-17 (H)	MC1210408-12 (H)	SRTEM1
U206G*	U20605310 thru U20607020	MC1210408-24 (H)	MC1210408-21 (H)	MC1210408-23 (H)	MC1210408-12 (H)	SRTEM1
TU206G*	U20605310 thru U20607020	MC1210408-24 (H)	MC1210408-21 (H)	MC1210408-23 (H)	MC1210408-12 (H)	SRTEM1
207*/T207*	20700001 thru 20700215	MC1210408-1	MC1210408-9 (H)	Not Available	MC1210408-6 (H)	SRTEM1
207*/T207	20700216 thru 20700562	MC1210408-18 (H)	MC1210408-15 (H)	MC1210408-16 (H)	MC1210408-12 (H)	SRTEM1
207A*/T207A*	20700216 thru 20700562	MC1210408-18 (H)	MC1210408-15 (H)	MC1210408-16 (H)	MC1210408-12 (H)	SRTEM1
207A*/T207A*	20700563 thru 20700788	MC1210408-24 (H)	MC1210408-15 (H)	MC1210408-22 (H)	MC1210408-12 (H)	SRTEM1
210, 210A	21057001 thru 21057840	Not Available	MC1210025-3 (H)	Not Available	MC1210025-2 (H)	SRTEM1
210B,C,D,E,F,G,H,J	21057841 thru 21059199	MC1210408-1	MC1210408-5 (H)	MC1210408-4	MC1210408-6 (H)	SRTEM1
2100,0,0,0,1,0,11,5	21037011 tind 21033133	Fwd MC1210520-11 (H)	1101210100 5 (11)	11012101001	Fwd MC1210520-2 (H)	SICILIT
210K,L*/T210K,L*	21059200 thru 21060539	Removable MC1210520-3	Fwd MC1210520-9 (H)	Fwd MC1210520-12 (H)	Removable MC1210520-4 (H)	SRTEM1
210L*,M/T210L*,M	21060540 thru 21062954	Fwd MC1210520-11 (H) Removable MC1210520-3	Fwd MC1211514-1 (H)	Fwd MC1211514-1 (H)	Fwd MC1210520-2 (H) Removable MC1210520-4 (H)	SRTEM1
210N,R/T210N,R	21062955 thru 21065009	Fwd MC1210520-15 (H)	Fwd MC1211514-2 (H)	Fwd MC1211514-2 (H)	Fwd MC1210520-16 (H)	SRTEM1
P210N*	P21000001 thru P21000150	Fwd MC1210520-11 (H)		Fwd MC1211514-1 (H)	Fwd MC1210520-2 (H)	SRTEM1
D240N* D	D21000151 How D21000071	Removable MC1210520-3			Removable MC1210520-4 (H)	CDTENA
P210N*,R	P21000151 thru P21000874	Fwd MC1210520-15 (H)	Fwd MC1211514-2 (H)		Fwd MC1210520-16 (H)	SRTEM1
T210F,G,H,J	T2100001 thru T2100454	MC1210408-1	MC1210408-5 (H)	MC1210408-4	MC1210408-6 (H)	SRTEM1
305A,B,C,D,E,F	All	Left-MC0611134-3 (H)		Right-MC0611134-2 (H)		SRTEM1
					SRTEM1	
* Partial model eligibilit	У			(۱	l)-These rails have seat adjust l	holes

## Seat Rail for Piper Aircraft

- Direct replacement
- Precision machined
- Gold anodized for corrosion resistance
- Dry lubricant applied for long service life
- Save hundreds of \$\$ They are prettier too!

Part Number MC62557-004 is used in all positions for all models listed below:

PA28-140, PA28-150, PA28-151, PA28-160, PA28S-160, PA28-161, PA28-180, PA28R-180, PA28S-180, PA28S-181, PA28-201T, PA28R-200, PA28R-201, PA28R-201T, PA28RT-201T, PA28RT-201T, PA28RT-201T, PA28-235, PA28-236, PA32-260, PA32-300, PA32R-300, PA32-301, PA32-301T, PA32R-301 (HP), PA32R-301 (SP), PA32R-301T, PA32RT-300T, PA32RT-300T, PA32S-300, PA34-200T, PA34-20 PA34-220T, PA44-180, PA44-180T

## **Seat Roller for Piper Aircraft**

Part number CA87332-002 Direct replacement

Eligible model series: PA28-40,150,151,160,161, 180,181,235,236,PA28R-180, 200,PA32-260,300,301,301T, PA32R-300,301,301T, PA32RT, PA34-200,200T,220T, PA46-310P, 350P

Manufactured by PMA Products, Inc.

## Seat Rails and Seat Parts



## Templates for Cessna Seat Rails

Templates make the job of transferring the original rivet hole pattern from the old seat rail to the new seat rail easy!

Inexpensive

Achieve a precise fit every time

#### To use the templates

- 1. Clamp the template to your old seat rail.
- 2. Drill holes through the holes in the old seat rail into the template.
- 3. Clamp the template to the new seat rail and drill several holes through the template and new seat rail
- 4. Set the new seat rail in position in the aircraft and check for proper seat rail alignment. The seat rails must be properly aligned and parallel with each other.
- 5. Clamp the templates again to the new seat rail and make any required alignment adjustments discovered during the aircraft test installation.
- 6. Drill all of the required holes through the template and the new seat rail.

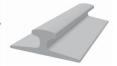
Models 150-152 do not require templates as the screw holes are pre-drilled. See seat rail eligibility for the template for your seat rails.

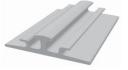
# **SRTEM1** 1.5" X 38" X .025" 2.25" X 30" X .025" SRTEM2 Seat Rail **SRTEM3** 1.5" X 58.63" X .025" One template per Seat Rail seat rail is required Template

## Seat Rail Extrusion

Ideal for the home built aircraft! For custom projects McFarlane offers six design types. Blank extrusion can be cut to most any length and is sold by the inch. We can also custom machine to your specifications.











Part Number STF101

Part Number STE102 2 3/10" X 7/10" X 1/2"

Part Number STE103 1 1/2" X 1/2" X 1/2"

Part Number STE104 2 3/10" X 1/2" X 1/2

Part Number STE108 1 3/4" X 5/8" X 1/2"

Part Number STE109 2 3/10" X 3/4" X 1"

## Rivet and Screw Kits

McFarlane offers either rivets or screws as convenient kits containing AN and MS hardware. Since it is difficult to install many of the rivets required to attach the seat rail, it is permissible to substitute screws with ultimate tensile strength exceeding 50 ksi with lock nuts provided the holes are ream fit and spotfaced. Each kit contains enough rivets or screws to install four seat rails. It is up to the installer to determine the correct screws or rivets to use when installing Cessna model 177 seat rails.

Installation hardware items are also available separately.

## SR150-SCREW-KT #10 Structural Screw Kit

required for all Cessna 150/152 models

Qty	Part Number	Desc.	Size
40	MS27039-1-08	Screw	10-32 X .531
2	MS27039-1-09	Screw	10-32 X .594
2	MS27039-1-17	Screw	10-32 X 1.094
40	MS21044N3	Nut	Nylon Lock, 10-32



#### **RIVET KIT 1** 1/8 & 5/32 Universal Head Rivet Kit

Qty	U/M	Part Number
22	Grams	MS20470 AD4-5
11	Grams	MS20470 AD4-6
14	Grams	MS20470 AD4-7
6	Grams	MS20470 AD4-10
6	Grams	MS20470 AD4-12
18	Grams	MS20470 AD5-5
13	Grams	MS20470 AD5-6
13	Grams	MS20470 AD5-7
10	Grams	MS20470 AD5-10
10	Grams	MS20470 AD5-12

## SR6-SCREW-KT

#6 Structural Screw Kit

Qty	Part Number	Desc.	Size
124	MS35206-228	Screw	6-32 X .375
40	MS35206-229	Screw	6-32 X .438
16	MS35206-230	Screw	6-32 X .5
12	MS27039-0811	Screw	8-32 X .719
12	MS27039-0812	Screw	8-32 X .781
12	MS27039-0813	Screw	8-32 X .844
12	MS27039-0814	Screw	8-32 X .906
35	NAS21042-08	Nut	Small Wrench Surface
80	NAS21042-06	Nut	Small Wrench Surface
80	MS21044N06	Nut	Nylon Lock, 6-32
200	AN960-6L	Washer	#6 Thin
100	AN960-8L	Washer	#8 Thin

#### SR8-SCREW-KT

#8 Structural Screw Kit

Qty	Part Number	Desc.	Size
124	MS27039-0807	Screw	8-32 X .469
40	MS27039-0808	Screw	8-32 X .531
12	MS27039-0809	Screw	8-32 X .594
12	MS27039-0810	Screw	8-32 X .656
12	MS27039-0811	Screw	8-32 X .719
12	MS27039-0812	Screw	8-32 X .781
12	MS27039-0813	Screw	8-32 X .844
12	MS27039-0814	Screw	8-32 X .906
80	NAS21042-08	Nut	Small Wrench Surface
80	MS21044N08	Nut	Nylon Lock, 8-32
200	AN960-8I	Washer	#8 Thin

#### FAA General Aviation Airworthiness Information Bulletin CE-90-03R2, 08/26/2002 Original Issue 01/16/1991

This alert gives direction for the replacement of seat rails for most Cessna airplanes as required by AD 87-20-03R2. This alert advises all owners and operators of the necessity to install all required fasteners when seat rails are being replaced. Many seat rails are manufactured with pilot holes only and do not contain all holes required for installation of the seat rail in the airplane. It is, therefore, necessary for the installer to assure that there are sufficient holes to accommodate all required fasteners.

Note these recommendations:

- 1. When replacing a seat rail, note the number and location of all fastener holes on the seat rail being removed.
- 2. Match these holes against the holes in the replacement seat rail. If the replacement seat rail does not have all of the same holes at the same locations, they must be drilled.
- 3. Since it is difficult to install many of the rivets required to attach the seat rail, it is permissible to substitute screws with ultimate tensile strength exceeding 50 ksi. Example of such screws are AN515, AN520, AN525, MS35206, MS35207, MS35214, MS35215, MS35218, MS35219, MS51957 or MS51958 with lock nuts, provided the holes are ream fit and spotfaced. For further information contact your local FAA office.

## Spotface Kit

Now modified for rail cap clearance! Spotface Kit contains a tool used with an electric drill to make a flat spot for screws. Cutter comes with three pilots Components sold as a kit or separately by part number.

Cutter P/N MIST 434-7, 1/8" pilot P/N 6078, 5/32" pilot P/N 6076, 3/16" pilot P/N 6077.

## Tie Downs Part number 8006 FAA-PMA/STC



Clamps to Cessna seat rails to provide tie down points to secure cargo.

- Cessna 150 thru 210 aircraft
- 4 required for every 100 lbs of cargo
- · Anodized aluminum for durability

Note: This product is not to be used as a seat stop.

Manufactured by: F Atlee Dodge Aircraft Services LLC

## Seat Roller Kits for Cessna Aircraft

#### Now also approved for 300-400 series aircraft!

McFarlane seat parts were developed to assist in complying with the parts replacement requirements of FAA Airworthiness Directive 87-20-03. This AD requires the periodic inspection and replacement of seat components of the entire Cessna light aircraft fleet. Our parts are direct replacements for the wear related seat components. All parts are available individually or as convenient kits.

#### Rollers

- Fabricated from molydisulfide filled nylon for improved strength and self-lubrication.
- Fully machined from extruded stock for a finer surface finish and higher strength.



- Machined from alloy steel
- Longer life
- Greater wear resisitance









## Choose the Correct Kit

The seat related replacement parts are not serial number specific, as the type of seat installed in the aircraft was optional when the aircraft was ordered from the factory. A common seat configuration is the pilot seat being "articulating" or "infinitely adjustable" while the co-pilot seat is the "standard" or "vertically adjustable" style.

The most positive way to ensure that you are choosing the proper seat kit for your aircraft is to measure the rollers.

#### SEAT-KT-1

Roller diameter approximately 1 3/8" This kit is used with the "infinitely adjustable" or "articulating" seats installed in the Cessna single engine aircraft from 1963 through 1986. Two adjustment crank handles identify this seat. The backrest angle is adjusted with a crank. It is also used with some 336-337 series aircraft. The SEAT-KT-1 contains the same components as four

of the Cessna 1714000K200 kits. All seats in the 177 Cardinal will use the large seat roller and require this kit. These parts are not used on models 150-152.

- (8) MC1714000-22 Washer
- (4) MCS1704-1 Roller
- (4) MC1414104-54 Bushing



### SEAT-KT-2

Roller diameter approximately 5/8" This kit is used with the "Standard" or "Vertically adjustable" seat installed in Cessna single engine aircraft from 1963 through 1986. This seat is identified by one or no adjustment crank handles. The seat back angle is adjusted with a lever on the side of the seat back. It is also used with some 336-337 series aircraft. The SEAT-KT-2 contains the

These parts are not used on models 150-152.

same components as four of the Cessna

- (8) MCS1554-1 Washer
- (4) MCS1551-1 Roller

1414100-212 kits.

(4) MC1414104-54 Bushing



#### Washers

- Super tough acetyl plastic
- · Resists wear and aging
- MC1714000-41 full round washer also available



## SEAT-KT-3

#### Roller diameter approximately 7/8" with no wear washers

This kit is used with all seats in the Cessna 150-152 series aircraft and all Cessna single engine aircraft built before 1963. A welded steel tubing seat frame easily identifies these seats. It is also used with some Cessna twin engine aircraft.

- (4) MC0311310 Roller
- (4) MC0311586 Bushing

## Obsolete Roller 1964-1965

Cessna aircraft manufactured in 1964 and 1965 had a spool shape roller with a smaller bushing. Use SEAT-KT-2 to replace this style roller.

The complete kit must be used, as the bushing size is different.



## Seat Rail Wear Gauge for Cessna Aircraft

### Checks seat rail wear limits as per FAA AD 87-20-03 Seat Rail Directive

The gauge is to be used for inspection of the Cessna seat rail wear. This gauge is designed to measure the actual radius wear near the seat stop holes. Notice the different sized steps in each corner. The sizes apply to the .36 and .42 diameter limits referred to in the AD. The .020 upper surface wear allowance allowed by the AD is designed into the gauge. This gauge is very precisely machined.

## Fast and Positive - No More Guessing!!



1. Place the .36 side of the gauge into each hole location showing wear.



2. Slide gauge back along top center of the rail until it contacts the hole edge. Make sure to keep the gauge parallel and square to the unworn rail surface.



3. If the step touches the rail and lifts the gauge up, the wear is less than .36.

If the step does not touch the rail, the wear is more than .36. Proceed to step 4.



4. Use the side of the gauge marked .42 to check if the wear at this hole is within maximum tolerance or if the rail needs to he replaced

a. Follow the same procedure as listed in Steps 1 through 3.

If the step does touch the rail, the wear is within acceptable limits and the inspection must be done every 100 hrs TIS (Time In Service) as listed in the A.D.

b. If the step does not hit the rail, the rail has wear greater than .42 and the seat rail must be replaced.



Order Online at www.mcfarlaneaviation.com or Call 888-750-5251

Part Number **GAUGE SR1**