

**915 Kearsley Park Blvd.
Flint, MI 48503**



**(810) 235-1402
www.glapinc.com**

INSTRUCTIONS A-9

Instructions for installing domed or bubble door Windows (OPENING style) in Cessna airplanes
CESSNA MODELS:

170, 170A, 170B

172, 172A, 172B, 172C, 172D, 172E, 172F (USAF T-41A), 172G, 172H (T-41A), 172I,
172K, 172L, 172M, 172N, 172P, 172Q, 172R, 172S,

P172D, R172E, R172F, R172G, R172H, (USAF T-41B. T-41C, T-41D), R172K, 172RG,
175, 175A, 175B, 175C,

180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J (THRU SN 18052384)

182, 182A, 182B, 182C, 182D,

185, 185A, 185B, 185C, 185D, 185E, A185E, A185F (THRU SN 18502310)

210A

(REIMS AVIATION S.A. MODELS:)

F172D, F172E, F172F, F172G, F172H, F172K, F172L, F172M, F172N, F172P,

FR172E, FR172F, FR172G, FR172H, FR172J, FR172K

MATERIALS REQUIRED:

- One of the following domed or bubble windows, Great Lakes Aero Products part number(s):
 - (LH) W-2901-2, W/T-2901-2, W/G-2901-2, SC-W/T-2901-2, SC-W/G-2901-2, W-2901-4, W/T-2901-4, W/G-2901-4, SC-W/T-2901-4, SC-W/G-2901-4, W-2901-6, W/T-2901-6, W/G-2901-6, SC-W/T-2901-6, or SC-W/G-2901-6,
 - (RH) W-2902-2, W/T-2902-2, W/G-2902-2, SC- W/T-2902-2, SC-W/G-2902-2, W-2902-4, W/T-2902-4, W/G-2902-4, SC-W/T-2902-4, SC-W/G-2902-4, W-2902-6, W/T-2902-6, W/G-2902-6, SC-W/T-2902-6, or SC-W/G-2902-6,
- Blind rivets (I.E. Cherry rivets) - not supplied.
- Sealant - Presstite # 579.6 or silicone sealant - I.E. GE or Dow Corning - not supplied.
- Placard - PN W-2910

TOOLS REQUIRED:

- Power Drill (I.E. Air or Electric)
- Drills or Drill set - proper sizes for blind rivets.
- Blind rivet puller for rivets.

REMOVAL AND INSTALLATION PROCEDURE:

1. The window assembly may be removed from the door by pulling the hinge pins or drilling the rivets out of the hinges and disconnecting the window stop. (Or installation may be done with the frame still attached to the door).
2. Drill out the blind rivets on the splice Ref FIG A - note - you only have to drill out half the rivets for the splice, it should not be necessary to remove the splice from both sides. NOTE: Some of the early aircraft used a 4 piece window frame, on these aircraft the frame may be separated at two of the splices, ideally separate splices which would separate the frame in 2 equal halves.
3. Spread the frame carefully so the old window can be removed with the least amount of bending or damage to the frame. Carefully clean and inspect the frame for any conditions which would create problems in installing the new window.
4. Compare the trimmed size of the bubbled window to the window you removed from the frame. Trim the new window as necessary - see attached trimming instructions.

5. Reinstall the new window, again being careful to not damage the frame. Sealant may be used as necessary to prevent excessive leakage. When the new window is in the proper position and the splice is slid together, the blind rivets can be installed. If a Rubber "U" Channel (Cessna P/N R581529) was used in the frame this may be re-installed on the new window, or it may be purchased separately from Cessna or Great Lakes Aero Products, Inc. Alternately a Felt pad, such as the pad used on the windshield may be used with sealant.
6. The window assembly may be reinstalled in the door, if it was removed in step 1.
7. Fill out the necessary paperwork - I.E. 337 form.

NOTES

- There is no change in weight and balance when 1/8" (.125") windows are replaced.
- For Cessna 172 sns 17275760 & UP, R172K, 172RG & FR172K aircraft a thicker door window from the factory was used. It is recommended to weigh the old window and the new window and calculate the weight and balance change.
- Install placard (Caution: do not open above 105 knots (120 mph)) either on the window or on an appropriate surface near the latch.
- The window can be resealed with 100% Silicone sealant from the outside if required - mask the window and the frame to minimize the mess created by the sealant.
- There may be a negligible change in airplane performance when domed windows are installed.
- The change in airflow over the window may cause the frame to leak air and hiss or make other noises at the front of the frame. The following pages list Cessna parts which may be used to install a second latch on the front of the frame if the leakage is objectionable. The new latch should be installed as far forward on the frame as possible but staying within the straight portion of the frame (see FIG A). Use the existing latch as a pattern to install the second latch.
- If a second latch is desired, the following pages give the part numbers needed to attach a second latch to the window frame and door (Reference FIG C & FIG D). As parts become unavailable it may be necessary to either locate them used from a salvage yard, or purchase and modify a later model latch and their associated parts.
- Any of the assemblies may be used on any model aircraft described here on these instructions. The model and serial number information below is for reference if the customer wishes to match the original equipment to their aircraft.
- It may be necessary to slightly modify the interior trim panels and upholstery for some latches and striker plates to work properly.
- Fig B shows the Model and serial numbers that use a hinged style latch assembly, a second assembly may be purchased if desired, or a later style latching system for the forward second latch may be installed. However it is necessary to keep the original hinged latch with these aircraft as there is no stop on the hinges.

FIG A

Typical Opening Frame Detail

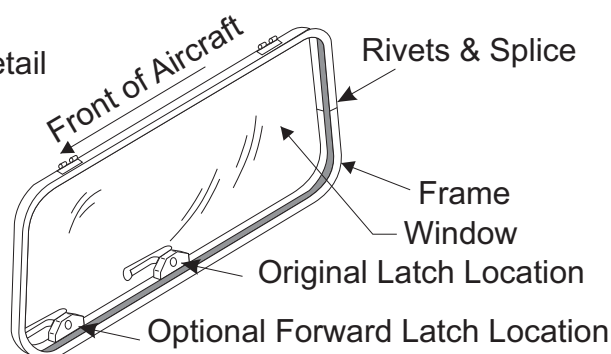


FIG B

170 sns 18003 thru 27169
 172 sns 28000 thru 46754
 175 sns 55001 thru 56239
 180 sns 30000 thru 32661
 182 sns 33000 thru 33842

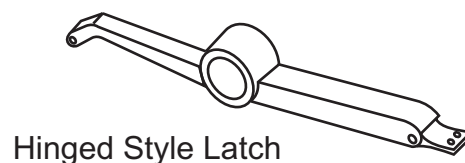


FIG C

Actual parts may vary from drawings

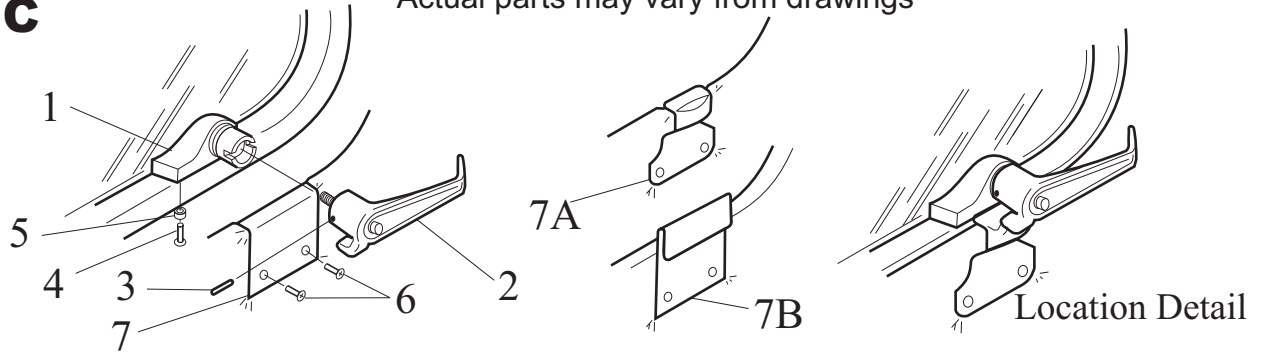


FIG	FIG ITEM	CESSNA PART NUMBER	PART NAME	UNITS PER ASM	USE ON CODE
C	1	1411202-201	Bracket Assembly	1	
	2	0711052-1 (LH)	Latch Assembly	1	A
		0811725-40 (LH)	Handle Assembly	1	B
	3	S1483-2 (LH) or S1483-1 (RH)	Handle	1	C, D, E, F, G
		NAS561P3-8	Roll Pin	1	
	4	NAS514P1032-14	Screw	2	
	5	NAS43HT3-34	Spacer	2	
	6	S1021Z8-8	Screw	2	
	7	0711023-13	Plate (reinforcing)	1	A
		0711021-7	Striker Plate	1	B, C
	7A	0517002-1	Striker Plate	1	D
	7B	0711093-1	Plate - Window latch	1	F
		0511241-1	Striker Plate	1	E
	0711026-1	Plate - Window latch	1	G	

CODE MODEL SERIAL NUMBERS

A ---	172	46755 thru 17249544
	175	56239 thru 17557119
B ---	172	17249545 thru 17250809
	F172	F172-0001 thru F172-0040
C ---	172	17250810 thru 17257161
	P172D	ALL
	R172E	R172-0001 thru R172-0335
	F172	F172-0041 thru F172-0559
	FR172	FR172-0001 thru FR172-0060
	180	32662 thru 18052905,
	182	33843 thru 18253598,
	185	185-0001 thru 185-0516 & 185-0787 thru 185-03458
210A	21057576 thru 21057840	
D ---	172	17257162 thru 17269309
	R172	R172-0336 thru R17200620 & R1722000 thru R1722724
	F172	F172-0560 thru F17201639
	FR172	FR172-0061 thru FR17200620
E ---	180	32662 thru 18051183
	182	33843 thru 18215198 - this part is listed as not available (from Cessna) so a used one may have to be found or one may have to be fabricated.
F ---	180	18051184 thru 18051464
	185	185-0517 thru 185-0786
G ---	182	sns 34754 thru 18253598

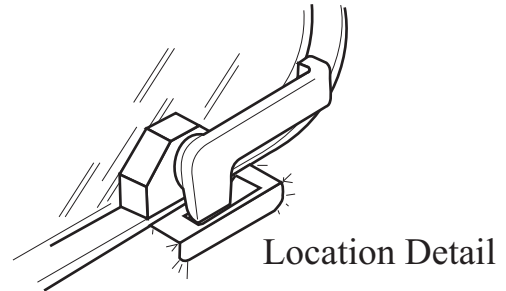
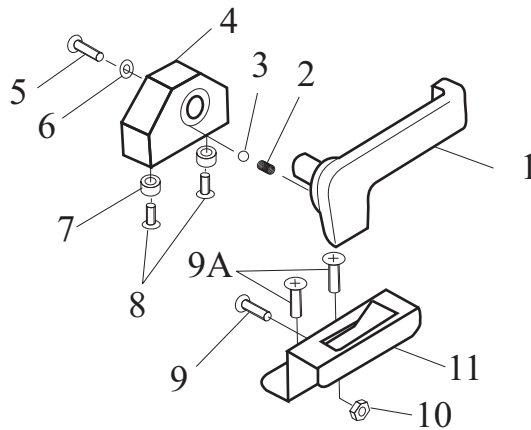
FIG D

FIG	FIG ITEM	CESSNA PART NUMBER	PART NAME	UNITS PER ASM	USE ON CODE
D		1217066-1 (LH), -2 (RH)	Latch Assembly	1	A
		1217066-3 or -5 (LH), -4 or -6 (RH)	Latch Assembly	1	B
	1	1217063-1 (LH), -2 (RH)	Handle	1	A
		1217063-7 or -11 (LH), -8 or -10 (RH)	Handle	1	B
	2	MS24585-1020	Spring	1	
	3	S272-5	Ball	1	
	4	1217063-3	Bracket-Latch	1	A
		1217063-9 or -12	Bracket-Latch	1	B
	5	S1931-8	Screw	1	
	6	NAS1149CN832R or AN960C8	Washer	1	A
		NAS1149CN832R	Washer	1	B
	7	NAS43HT3-34	Spacer	2	
	8	NAS514P1032-14	Screw	2	
	9	AN507-832R7	Screw	1	
	9A	AN507-832R6	Screw	2	
	10	MS21044N08	Nut	1	
	11	1217065-1 or 3 (LH), -2 or -4 (RH)	Striker plate	1	A
		1217065-7 or -9 (LH), -8 or -10 (RH)	Striker plate	1	B

CODE	MODEL	SERIAL NUMBERS
A----	172	17269310 thru 17276654
	R172	R1722725 & UP
	172RG	ALL
	F172	F17201640 & UP,
	FR172	FR17200621 & UP
	180	18052906 & up,
	185	18503459 & up

B ---- 172R & 172S

NOTE: As Cessna part numbers are Superseded, later (or newer) parts may be used if earlier parts become unavailable.