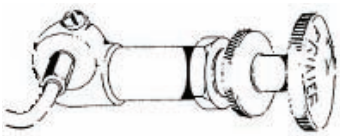
Fuel Primer Seal Kit

P/N FPS-KT-1

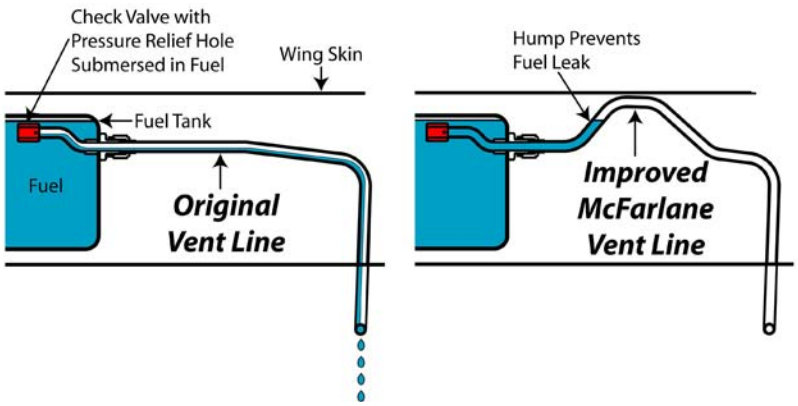
Contains two MIL-SPEC fuel-proof fluoroelastomer (Viton) o-rings required to service most standard fuel primers.



Improved Fuel Vent Lines for Cessna Aircraft

Stops fuel waste!

- Stops asphalt damage
- Stops environmental damage
- Fly with known full tanks
- Extends useful range
- Pays for itself quickly at $4.00 per gallon
- Adds value to your airplane
- FAA-PMA direct replacement, no STC or 337 form needed



The fuel vent line on most Cessna single engine aircraft attaches to a check valve inside the tank to prevent fuel from flowing out of the vent line, but this valve has a weep hole that allows some fuel to pass to prevent over-pressurization. Unfortunately, this weep hole is much lower than the fuel level with full tanks. Fuel will continuously leak out of the vent line until the fuel level is below the weep hole. With the original vent line, you cannot fill the tanks without wasting a lot of fuel.

The Cessna legacy aircraft also have a tank interconnect vent line that allows fuel from both tanks to leak out of the vent. When parked on an unlevel surface, the fuel loss from these aircraft can be many gallons.

McFarlane has solved these problems with a redesigned vent line featuring a unique hump that extends above the top of the tank. Some fuel can still escape through the weep hole and out the vent to prevent over-pressurization. However, once the pressure is relieved, the tanks will remain full.

Convenient Kits and Components

Kits containing a new connection hose (where required), P/N MCS1495-8 and rubber grommet, P/N MS35489-14 are also available where applicable. Just add a "K" suffix to the part numbers listed below. Rubber tubing sold by the foot is available by ordering P/N R221485.

Installation Tip:

Access to loosen or tighten the vent line in most of the Cessna aircraft is very tight because the tube flare nut ("B" nut) sits partway in the wing rib. However, with the correct wrench, you can normally loosen the nut from the under-wing inspection holes without removing the top tank access skin. The fitting in the tank has indexing flats and will normally not rotate while the tube flare nut is being loosened and re-tightened for the new line. Use caution in starting the nut as the Cessna tank fitting is a welded assembly with soft aluminum. Be sure not to cross-thread or over tighten the nut as you can easily strip the threads on this fitting.

		Standard Range Tanks		Extended Range Tanks	
Aircraft Model	**Serial Number**	**Left**	**Right**	**Left**	**Right**
150, 150A	All	MC0400311-119 Only for use with Cessna vent assembly 0523552-2 [2]		MC0400311-121 Only for use with Cessna vent assembly 0523552-2 [2]	
150B,C,D,E,F,G,H,J,K,L,M, F150F,G,H,J,K,L,M	All	MC0400311-119		MC0400311-121	
A150K,L,M, FA150K,L,M, FRA150L,M	All	MC0400311-120			
152, F152	All	MC0400311-119		MC0400311-121	
A152, FA152	All	MC0400311-120			
172, 172A,B,C	All	MC0523559-8 Only for use with Cessna vent assembly 0523552-2 [2]			
172D,E,F,G,H,I		MC0523559-8			
172K,L,M[1]	17257162 thru 17260805	MC0523559-8		MC0523559-6	
172M[1],N	17260806 thru 17274009	MC0523559-12		MC0523559-11	
172P	All	MC0523559-12 MC0523098-1 Integral Cell		MC0523559-11	
172Q	All	MC0523559-11 MC0523098-1 Integral Cell			
172RG	All	MC0523098-1			
F172D,E,F,G,H[1]	F172-0001 thru F172-0561	MC0523559-8			
F172H[1],K,L	F172-0560 thru F17200904	MC0523559-8		MC0523559-6	
F172M[1]	F17200905 thru F17201234	MC0523559-12			
F172M[1],N	F17201235 thru F17202254	MC0523559-12		MC0523559-11	
FP172	All	MC0523559-6			

Continued on next page

Improved Fuel Vent Lines for Cessna Aircraft

Continued from previous page

Aircraft Model	Serial Number	Standard Range Tanks		Extended Range Tanks	
		Left	Right	Left	Right
FR172J,K	All	MC0523559-11 MC0523098-1 Integral Cell			
P172D	All	MC0523559-6			
R172K	All	MC0523559-11 MC0523098-1 Integral Cell			
175, 175A,B,C		MC0523559-6 Only for use with Cessna vent assembly 0523552-2 [2]			
180[1]	32488 thru 32661	MC0716122 Only for use with Service Kit SK180-6			
180A,B,C,D	All	MC0716127-1			
180E,F	All	MC0716127-1	MC0716127-2 Not used with 0726001-16 RH Standard Fuel Tank	MC1200106-51	MC1200106-52
180G,H,J,K[1]	18051313 thru 18053000	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
180K[1]	18053001 thru 18053203	MC1200106-266	MC1200106-267		
182	All	MC0716122			
182A,B,C,D	All	MC0716127-1			
182E,F,G,H,J,K,L,M,N,P,Q[1]	18253599 thru 18266590	MC0716127-1		MC1200106-51	
182Q[1],R,S,T	18266591 thru 18299999	MC1200106-266	MC1200106-267		
F182P,Q[1]	F18200001 thru F18200094	MC0716127-1		MC1200106-51	
F182Q[1]	F18200095 thru F18200169	MC1200106-266	MC1200106-267		
FR182[1]	FR18200001 thru FR18200020	MC0716127-1		MC1200106-51	
FR182[1]	FR18200021 thru FR18200070	MC1200106-266	MC1200106-267		
R182[1]	R18200001 thru R18200583	MC0716127-1		MC1200106-51	
R182[1],TR182[1]	R18200584 thru R18202041	MC1200106-266	MC1200106-267		
T182,T182T	All	MC1200106-266	MC1200106-267		
185, 185A,B,C,D,E,A185E,A185F[1]	185-0001 thru 18503683	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
A185F[1]	18503684 thru 18504448	MC1200106-266	MC1200106-267		
210-5 (205), 210-5A (205A)	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
206,P206,P206A,B,C,D,E, TP206A,B,C,D,E TU206A,B,C,D,E,F,G U206, U206A,B,C,D,E,F,G	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
206H,T206H	All	MC1200106-266	MC1200106-267		
207,207A,T207,T207A	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52
210,210A,B,C,D,E,F T210F	All	MC0716127-1	MC0716127-2	MC1200106-51	MC1200106-52

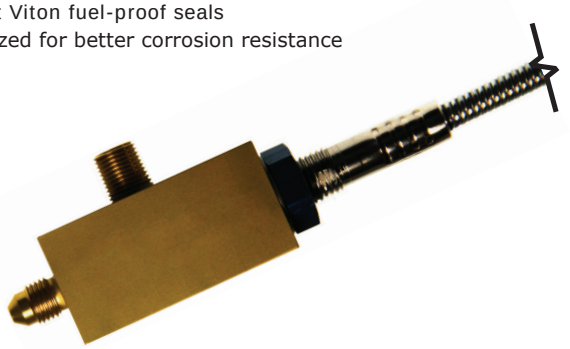
[1] Partial model eligibility

[2] These aircraft originally used ¼" vent lines, however they may be upgraded to a ⅜" vent line with the installation of the P/N 0523552-2 vent assembly per the applicable IPC. The indicated McFarlane vent lines are only eligible for use with the upgraded vent assembly.

King Air Fuel Drain Valve

Improved, repairable valve for thousands less than Beech!
Fuel Drain Valve P/N MC90-380016-1

- Improved seal design provides a long life reliable valve.
- Teflon lined control conduit and stainless steel cable.
- Reliable design - proven over 10,000 cycles.
- Approved for models A90, B90, C90, C90A, C90GTi, C90GT, E90, F90, 99, 99A, A99, B99, C99, 100 and A100
- Latest Viton fuel-proof seals
- Anodized for better corrosion resistance



P/N MC90-380016-1 consists of two components: a valve housing, and a replaceable valve control/plunger subassembly (P/N 6325K). Only McFarlane valves are repairable, Beech valves do not have replaceable components.

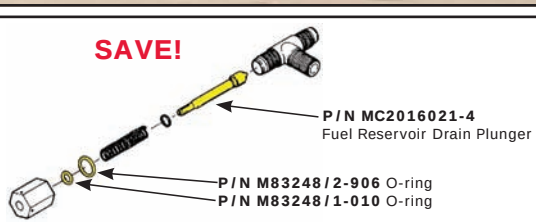
Unheard of 10 Year Limited Warranty!

SAVE $$

Cessna 177RG and F177RG Fuel Reservoir Drain Plunger

- All metal, one piece design eliminates the flimsy C-clip.
- McFarlane's Vulcanize bonded blue Viton® rubber tip outlasts the original in any fuel.
- Convenient kits available containing the plunger and O-rings, P/N FDV-KT-1.

SAVE!



McFarlane
FAA-PMA Approved

Fuel Strainer Parts for Cessna Aircraft

McFarlane can replace your fuel system parts with high quality McFarlane manufactured parts. Now offering fuel bowls, top assemblies, fuel bowl washers, fuel bowl nuts, standpipes, plungers, stainless steel washers for your plunger, fuel-proof flourocarbon O-rings, fuel strainer drain cables and fuel strainer seal kits.
Buy any components separately or as convenient kits.

- Improved safety
- More reliable
- Longer life
- Less money

Maintenance Tip:
Cleaning the Fuel Screen - The fuel screen is removed by removing the standpipe. The rubber tipped plunger must be unseated before the standpipe is loosened. Failure to lift the plunger off of its standpipe seat can damage the plunger. Pull the strainer drain knob as if you were draining the fuel bowl. Block or clamp the knob in this position. Insert a smooth round tool such as a screw driver or punch in the standpipe cross-hole and un-screw the standpipe.

Fuel Bowl
P/N MC0756008-1

- Computer machined (not die cast)
- Gold anodized for additional corrosion resistance.
- This bowl is engineered to last!

Fuel Strainer Plunger
P/N MC0756010-11

- Special electro polished shaft for longer O-ring life
- McFarlane's Vulcanize bonded blue Viton® rubber tip outlasts the original in any fuel.

Fuel Strainer Standpipe
P/N MC0756011-1

- Stainless steel
- Costs less
- No more corrosion pits
- No more stripped threads
- The last one you will buy!

Fuel Strainer Drain Cables
P/N MCS1517 Series

- Stainless steel conduit
- Improved aluminum knob
- Larger wire diameter

Fuel Strainer Seal Kits
P/Ns FS-KT-1, FS-KT-9, FS-KT-10 and FS-KT-11

Only McFarlane has approval to replace the old less fuel resistant O-rings with the latest fuel-proof flourocarbon O-ring.
Kits include applicable gasket and O-rings to seal the fuel strainer.

Fuel Strainer Gasket
P/N MC0756041-1

- Fuel proof Viton foam won't shrink or harden due to fuel exposure.
- Fits restart Cessna aircraft and late U206G/TU206G models.

Maintenance Tip:
Cessna maintenance manual requires replacement of this gasket every 100 hours.

Fuel Top Assembly
P/N MC0756005-2

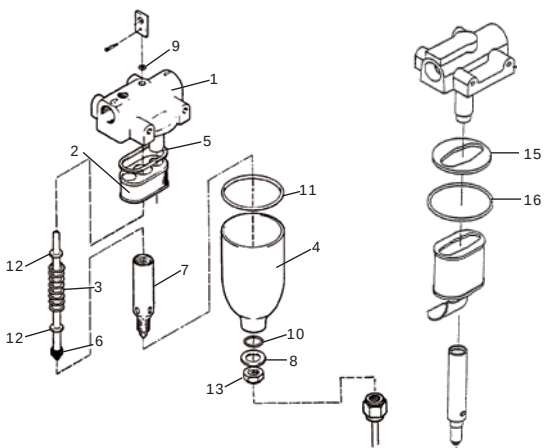
- All aluminum construction prevents galvanic corrosion between housing and inlet tube.
- Fully anodized to prevent corrosion and galvanic reaction between the brass filter and aluminum inlet tube.
- Improved fuel inlet tube attachment ensures a reliable secure fit
- Save $$

Fuel Strainer Kits for Cessna Aircraft

Save time and money with convenient kits!

See eligibility on the following page.

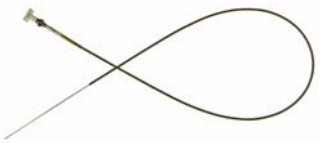
Qty	Part Number	Description	Index
FS-KT-1 Fuel Strainer Seal Kit			
1	MC0756009-8	Gasket	5
1	MCM83248/1-010	O-ring	9
1	MCM83248/1-111	O-ring	10
1	MCM83248/1-138	O-ring	11
FS-KT-2 Fuel Bowl Kit			
1	FS-KT-1	Fuel Strainer Seal Kit	
1	MC0756008-1	Fuel Bowl	4
1	MC0756015-1	Washer	8
1	MCS1573-3	Nut	13
FS-KT-3 Fuel Strainer Rebuild Kit			
1	FS-KT-2	Fuel Bowl Kit	
1	0756012-1	Spring	3
1	MC0756010-11	Plunger	6
1	MC0756011-1	Standpipe	7
2	MCS1450-27A7-032	Washer	12
FS-KT-4 Fuel Strainer Kit			
1	FS-KT-3	Fuel Strainer Kit	
1	MC0756005-2	Top Assembly	1
1	0756009-1	Filter	2
FS-KT-5 Fuel Strainer and Cable Kit			
1	FS-KT-4	Fuel Strainer Kit	
1	MCS1517-7	Strainer Drain Cable	14
FS-KT-6 Fuel Strainer Kit			
1	MC0756005-2	Top Assembly	1
1	0756009-7	Filter	2
1	FS-KT-3	Fuel Strainer Rebuild Kit	
FS-KT-7 Fuel Strainer and Cable Kit			
1	FS-KT-6	Fuel Strainer Kit	
1	MCS1517-7	Strainer Drain Cable	14
FS-KT-9 Fuel Strainer Seal Kit			
1	MC0756041-1	Gasket	15
1	M83248/1-011	O-ring	18
1	M83248/1-111	O-ring	17
1	M83248/1-138	O-ring	16
FS-KT-10 Fuel Strainer Seal Kit			
1	MC0756041-1	Gasket	15
1	M83248/1-010	O-ring	9
1	M83248/1-111	O-ring	17
1	M83248/1-138	O-ring	16
FS-KT-11 Fuel Strainer Seal Kit			
1	MC0756041-1	Gasket	15
1	M83248/1-111	O-ring	17
1	M83248/1-138	O-ring	16
FS-KT-12 Fuel Plunger Kit			
1	FS-KT-1	Fuel Strainer Seal Kit	
1	MC0756010-11	Plunger	6
1	MC0756015-1	Washer	8
1	MCS1573-3	Nut	13



Buy Convenient Kits!

Eligibility on the following page

Eligibility for Fuel Strainer Parts and Kits for Cessna Aircraft



Cessna Models	Serial Numbers	P/N and Description	MC0756005-2 Fuel Top Assembly	MC0756008-1 Fuel Bowl	MC0756010-11 Fuel Strainer Plunger	MC0756011-1 Fuel Strainer Standpipe	MCS1517-7 Fuel Strainer Drain Cable	FS-KT-1 Fuel Strainer Seal Kit	FS-KT-2 Fuel Bowl Kit	FS-KT-3 Fuel Strainer Rebuild Kit	FS-KT-4 Fuel Strainer Kit	FS-KT-5 Fuel Strainer and Cable Kit	FS-KT-6 Fuel Strainer Kit	FS-KT-7 Fuel Strainer and Cable Kit	FS-KT-9 Fuel Strainer Seal Kit	FS-KT-10 Fuel Strainer Seal Kit	FS-KT-11 Fuel Strainer Seal Kit	FS-KT-12 Fuel Plunger Kit
150E[1]	15060773 thru 15061152						•											
150E[1],F,G,H,J,K,L,M, A150K,L,M	15061153 thru 15079405 and A1500001 thru A1500734		•	•	•	•	•	•	•	•	•	•						•
F150F,G,H,J,K,L,M, FA150K,L,M	All		•	•	•		•	•	•									
FRA150L,M	All		•				•											
152, A152	All		•	•	•	•	•	•	•	•	•	•						•
F152, FA152	All		•	•	•		•	•	•									
172D,E,F[1]	17249545 thru 17252533						•											
172F[1],G,H	17252534 thru 17256512 and 638		•	•	•	•	•	•	•	•	•	•						•
172I,K,L,M,N,P,Q	All		•	•	•	•	•	•	•	•	•	•						•
172R,S	All														•			
172RG	172RG0001 thru 172RG0890 and 691		•	•	•	•	•	•	•	•	•	•						•
172RG	172RG0891 thru 172RG1191		•	•		•	•	•	•									
P172D	All			•		•		•	•	•	•							
F172D,F[1]	F172-0001 thru F172-0139						•											
F172F[1],G,H,K,L,M,N,P	F172-0140 thru F17202254		•	•	•		•	•	•									
FR172E	All		•	•	•			•	•									
FR172F,G,H,J,K	All		•	•	•		•	•	•									
R172E	All		•															
R172F,G,H	All		•				•											
R172K	All		•	•	•		•	•	•									
177, 177A,B	All		•	•	•	•	•	•	•	•	•	•						•
177RG	All		•	•	•	•		•	•	•	•							•
F177RG	All		•		•													
180H[1],J,K	18051497 thru 18051875		•	•	•	•		•	•	•	•							•
180H[1],J,K	18051876 thru 18053203[2]		•	•	•	•	•	•	•	•	•	•						•
182H[1],J,K	18256040 thru 18258505 and 675, 18255845		•	•	•	•		•	•	•	•							•
182L,M,N,P,Q,R	All		•	•	•	•	•	•	•	•	•	•						•
182S,T, T182T	All																•	
F182P,Q	All		•	•	•		•	•	•									
FR182	All		•	•	•		•	•	•									
R182, TR182	All		•	•	•	•	•	•	•	•	•	•						•
T182	All		•	•	•	•	•	•	•	•	•	•						•
185D[1],E	185-0844 thru 185-1149		•	•	•	•		•	•	•			•					•
A185E[1]	185-0968 thru 185-1149		•															
A185E[1],F	185-1150 thru 185-1300		•	•	•	•		•	•	•			•					•
A185E[1],F	185-1301 thru 18504448		•	•	•	•	[2]	•	•	•			•	[2]				•
188,188A,B	188-0001 thru 18802348 and 653		•	•	•	•	•	•	•	•								•
A188,A188A,B[1] (w/fslge tanks)	188-0001 thru 18802348, 18800833T thru 18802348T and 653, 678T		•	•	•	•	•	•	•	•			•	•				•
A188,A188A,B[1] (w/wing tanks)	188-0001 thru 18802348, 18800833T thru 18802348T and 653, 678T		•	•	•	•	[3]	•	•	•			•					•
A188B[1] (w/fuselage tank)	18802349 thru 18802745		•	•	•	•	•	•	•	•			•	•				•
A188B[1] (w/wing tanks)	18802349 thru 18803973, 18802349T thru 18803973T		•	•	•	•	[3]	•	•	•			•					•
T188C	T18803325T thru T18803974T and T18802839T, 3307T, 3308T		•	•	•	•	[3]	•	•	•			•					•
206H,T206H	All																•	
P206,P206A,B, TP206A,B	All		•	•	•	•		•	•	•			•					•
P206C,D,E, TP206C,D,E	All		•	•	•	•	•	•	•	•			•	•				•
U206, U206A,B	All		•	•	•	•		•	•	•			•					•
U206C,D,E,F[1],G[1]	U206-0915 thru U20606846 and 676		•	•	•	•	•	•	•	•			•	•				•
U206G [1]	U20606847 thru U20607020						•									•		
TU206A,B	All		•	•	•	•		•	•	•			•					•
TU206C,D,E,F[1],G[1]	U206-0915 thru U20606846 and 676		•	•	•	•	•	•	•	•			•	•				•
TU206G[1]	U20606847 thru U20607020						•									•		
207,207A,T207,T207A	All		•	•	•	•	•	•	•	•			•	•				•
210E,F,G	All		•	•	•	•		•	•	•			•					•
210H,J,K,L,M,N[1]	21058937 thru 21064535		•	•	•	•	•	•	•	•			•	•				•
210N[1]	21064536 thru 21064897			•		•	•	•	•									
210R, T210R	All		•				•											
T210F,G	All		•	•	•	•		•	•	•			•					•
T210H,J,K,L,M,N[1]	T210-0308 thru T210-0454, 21059200 thru 21064535 and 21058140		•	•	•	•	•	•	•	•			•	•				•
T210N[1]	21064536 thru 21064897		•	•		•	•	•	•									
P210N[1]	P21000001 thru P21000760		•	•	•	•	•	•	•	•			•	•				•
P210N[1]	P21000761 thru P21000834			•		•	•	•	•									
337, 337A,B,C,D,E,F	All		•	•	•			•	•									
337G,H (standard range)	All		•	•	•	•		•	•	•			•					•
337G,H (long range), F337E,F,G,H	All		•	•	•			•	•									
FT337E,F, FT337GP, FT337HP	All		•	•	•			•	•									
T337B,C,D,E,F[1]	337-0526 thru 33701351 and 337-0001		•	•	•			•	•									
T337F[1]	33701352 thru 33701398		•	•				•	•									
T337H (standard range)	All		•	•				•	•									
T337H (long range)	All		•	•		•		•	•									
T337G, P337H	All		•		•	•												
T1137H-SP	All		•															

[1] Partial model eligibility
[2] Aircraft without floats use P/N MCS1517-7 and Aircraft with floats use P/N MCS1517-4.
[3] Models 188, 188A, A188, A188A,B S/N 188-0446 thru 18803926T with wing tanks use P/N MCS1517-12.
Model T188C, S/N T18803297T thru T18803926T with wing tanks use P/N MCS1517-15.

Fuel Gascolator Assemblies

Fast and Easy to Maintain!

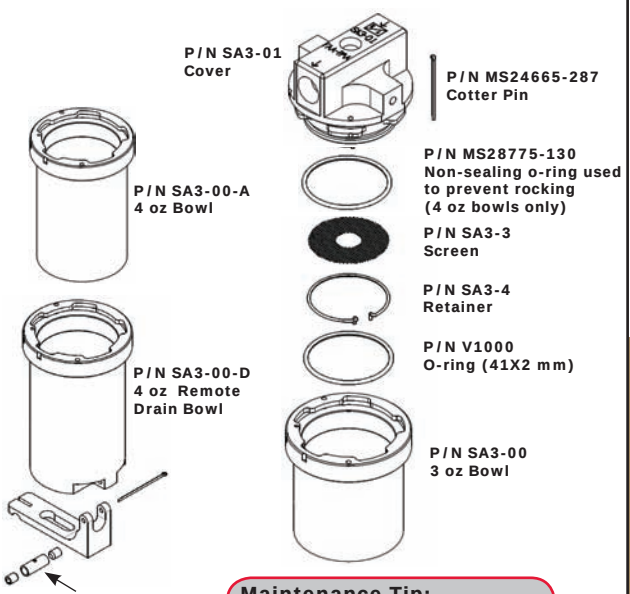
Gascolators are precision machined out of 6061 aluminum and an improved o-ring seal.
No more wire bails popping out of the cover! Eliminates stripped thumb wheels and screws.

Gascolator fits in existing Piper mounting brackets. Mounting brackets for Cessna aircraft are available. Each gascolator includes a screen, screen retainer and O-rings that seal the bowl to the top of the gascolator. D Series remote drain bowl also include the drain valve and lever.

- FAA-PMA/STC (SA01026SE) and EASA approved
- STC, AML and installation instructions included
- Unique bayonet tab lock makes maintenance easy
- Tested to 180 PSI
- Great for homebuilt aircraft
- Spare o-ring included with 4 oz. bowls

P/N	Description	Remote Drain	Mounting Style	Sediment capacity (oz)	Max fuel tank capacity (gal)
1/4 NPT (3/8 ID Fuel Line) Gascolators					
SA3-00	3 oz bowl		Side	3	60
SA3-00-A	4 oz bowl		Side	4	80
SA3-00-B	3 oz bowl with top mount cover		Top	3	60
SA3-00-B-D	4 oz with top mount cover w/ remote drainable bowl	X	Top	4	80
SA3-00-BS	3 oz bowl for Vulcan Air/Partenavia aircraft only		Side	3	60
SA3-00-C	4 oz bowl with top mount cover		Top	4	80
SA3-00-D	4 oz remote drainable bowl	X	Side	4	80
3/8 NPT (1/2 ID Fuel Line) Gascolators					
SA3-10	4 oz bowl		Side	4	80
SA3-10-A	4 oz bowl with top mount cover		Top	4	80
SA3-10-A-D	4 oz with top mount cover w/ remote drainable bowl	X	Top	4	80
SA3-10-B	3 oz bowl		Side	3	60
SA3-10-C	3 oz bowl with top mount cover		Top	3	60
SA3-10-D	4 oz remote drainable bowl	X	Side	4	80

Individual Components	
C-120/140 Kit	Cessna 120/140 fuel line and bracket install kit contains (1) SA3-05 and (1) SA3-06
SA3-3	Screen
SA3-4	Screen Retainer
SA3-05	Bracket for 120/140 aircraft only
SA3-06	Fuel Line for 120/140 aircraft only
SA3-07	Bracket, Side Mount
SA3-11	Bracket, Top Mount
SA3-14	Barrell Nut Assembly used on "D" remote series only
V1000	O-ring (41X2mm)
MS24665-287	Cotter Pin (3/32" X 1-1/4")
MS28775-130	O-ring



Maintenance Tip:
Avoid sealant on 1st thread to avoid contamination in fuel.

P/N SA3-05 Bracket | P/N SA3-06 Fuel Line | P/N SA3-07 Bracket | P/N SA3-11 Bracket

SA3-00 3 oz Bowl | **SA3-10** 4 oz Bowl | **SA3-10-A** 4 oz Bowl w/Top Cover | **SA3-D Series** Drainable Bowl

Aircraft	S/N	1/4 NPT (3/8 ID Fuel Line) Gascolators P/Ns: SA3-00 3 oz bowl	SA3-00-A 4 oz bowl	SA3-00-B 3 oz bowl with top mount cover	SA3-00-B-D 3 oz with top mount cover with remote drainable bowl, no bracket	SA3-00-BS 3 oz bowl for Vulcan Air/Partenavia aircraft only	SA3-00-C 4 oz bowl with top mount cover	SA3-00-D 4 oz remote drainable bowl	3/8 NPT (1/2 ID Fuel Line) Gascolators P/Ns: SA3-10 4 oz bowl	SA3-10-A 4 oz bowl with top mount cover	SA3-10-A-D 4 oz with top mount cover with remote drainable bowl, no bracket	SA3-10-B 3 oz bowl	SA3-10-C 3 oz bowl with top mount cover	SA3-10-D 4 oz remote drainable bowl
Aeronca, Aero Commander (Dynac), (Voltaire)														
100-180, 15AC, S15AC	All												•	
100,100A, 10, 10A	All	•	•					•						
11CC, S11CC	All	•												
50-C,50-L,50-LA,50-TC,50-TL, 60-TF, 65-C,65-CA,65-LA,65LB,65-TAC,65-TAF, 65-TAL,65-TC,65-TF,65-TL, CF,K,KC,KCA,KS, O-58A,O-58B, S15AC, S-50-C, S-65-C,S-65-CA, SO-58B, YO-58,YO-TC	All	•	•											
Aviat														
A-1,A-1A,A-1B	All	•	•					•						
A-1C-200	All		•					•						
Bellanca														
14-13,14-13-2,14-13-3,14-13-3W	All			•	•		•							
Britten-Norman (Pilatus)														
BN-2,BN-2A,BN-2A-2,BN-2A-3,BN-2A-6,BN-2A-8,BN-2A-9,BN-2A-20, BN-2A-21,BN-2A-26,BN-2A-27, BN-2B-20,BN-2B-21,BN-2B-26,BN-2B-27	All	•	•					•						
Cessna														
120, 140	All	•	•					•						
150, 150A,B,C,D,E	All			•	•		•							
150F,G,H,J,K,L,M	All[2]		•	•	•			•						
A150K	All[2]		•					•						
A150L,M	All[2]	•	•					•						
152, A152	All[3]								•					•
170A,B	All			•	•		•							
172, 172A,B,C,D,E,F[1]	28000 thru 17252533			•	•		•							
172F[1],G,H,I,K,L,M,N,P,Q	17252534 and On[3]								•					•
172R,S	All[3]								•					
172RG, P172D, R172E,F,G,H,J,K, 175, 175A,B,C	All			•	•		•							

[1] Partial Model Eligibility
[2] Use Bracket P/N SA3-07
[3] Use Bracket P/N SA3-11
[4] Must use consolidated gascolator P/N 5221
[5] Systems with ⅜" fuel lines use SA3-00, systems with ½" fuel lines use SA3-10-C

Eligibility continued on next page

Fuel System Parts

SA3-00
3 oz Bowl

SA3-10
4 oz Bowl

SA3-D Series
Drainable
Bowl

Continued from previous page

Aircraft	S/N	1/4 NPT (3/8 ID Fuel Line) Gascolators P/Ns	SA3-00 3 oz bowl	SA3-00-A 4 oz bowl	SA3-00-B 3 oz bowl with top mount cover	SA3-00-B-D 3 oz with top mount cover with remote drainable bowl, no bracket	SA3-00-BS 3 oz bowl for Vulcan Air/Partenavia aircraft only	SA3-00-C 4 oz bowl with top mount cover	SA3-00-D 4 oz remote drainable bowl	3/8 NPT (1/2 ID Fuel Line) Gascolators P/Ns	SA3-10 4 oz bowl	SA3-10-A 4 oz bowl with top mount cover	SA3-10-A-D 4 oz with top mount cover with remote drainable bowl, no bracket	SA3-10-B 3 oz bowl	SA3-10-C 3 oz bowl with top mount cover	SA3-10-D 4 oz remote drainable bowl
Cessna																
177, 177A,177B	All[3]										•					•
180, 180A,B,C,D,E,F,G,H[1]	30000 thru 18051496											•	•			
180H[1],J,K	18051497 thru 18053203[3]															•
182, 182A,B,C,D,E,F,G,H[1]	33000 thru 18256039											•	•			
182H[1]J,K,L,M,N,P,Q	18256040 and On[3]															•
185, 185A,B,C,D[1]	185-0001 thru 185-0843											•	•			
185D[1],E, A185E,F	185-0844 and On[3]															•
210-5(205), 210-5A(205A), 206	All											•	•			
U206A,B,C,D,E,F,G, TU206A,B,C,D,E,F,G	All[3]															•
210, 210A,B,C,D,E, 310, 310A,B,C,D,F,G,H,I,J,K	All											•	•			
305A,B,C,D,E,F	All							•								
Champion/Aeronca																
7AC,7ACA,7BCM,7CCM,7DC,7EC,7ECA,7FC,7KCAB,S7AC,S7CCM,S7DC,S7EC, 8KCAB, 11AC,11BC,S11AC,S11BC	All		•	•					•							
11CC, S11CC	All			•					•							
7GCAA, 7GCBC,8GCBC	All													•		
Emigh (Edward Scott Kearns)																
A-2	All		•	•					•							
Ercoupe (Univair)																
A-2	All				•			•								
A2-A	All				•											
415-C, 415-CD, 415-D, F-1, F-1A	All		•	•												
415-E	All		•													
M10	All				•											
Extra Flugzeugbau GmbH EA																
300,300/200,300/L,300/S	All		•	•					•							
300/LC			•													
Interstate Aircraft (STOL)																
S-1A,S-1A-65F,S-1A-85F,S-1A-90F	All		•													
Luscombe																
8,8A,8B,8C,8D,8E,8F,T-8F	All		•	•					•							
Maule Bee Dee																
M-4,4C,4S,4T, M-4-180C,180S,180T, M-4-210,210C,210S,210T,220C,220S, 220T, M-5-180C,210C,210TC,220C, 235C, M-6-180, 235, M-7-235, M-7-235-A,B,C, M-7-260,260C, MT-7-235,260, MX-7-160,160C,180,180AC,180B,180C, 235, MXT7-160,180,180A, M-8-235,	All[5]		•	•					•						•	
M-5-200	All		•						•						•	
Mooney																
M10					•			•								
M-18C,18C55,18L,18LA, M20, M20A,B,C,D,E,F,G,J,K,L,M,R,S,TN[4]	All		•	•												
Navion																
(Sierra Hotel Aero), (Army L-17A), A,B,D,E,F,G,H	All											•	•			
Partenavia																
P.68, 68B,68C,68C-TC	All						•									
Piper																
AE-1, HE-1, JC3-40,50,50S,65,65S, J3F-50,50S,60,60S,65,65S, J3L, J3L-65,65S, J3L-S, J4, J4A,A-S, J4E, J5A, J5A-80, J5B, J5C	All		•	•					•							
PA-11, PA-11S, PA12, PA12S, PA-14, PA-15, PA-16, PA-16S, PA-17	All		•	•					•							
PA-18,PA-18A,PA-18S,PA-18 "105" (Special), PA-18S "105",PA-18 "125", PA-18AS "125",PA-18S "125",PA-18 "135",PA-18A"135", PA-18AS "135", PA-18S "135",PA-18 "150",PA-18A "150",PA-18AS "150",PA-18S "150", PA-19 (Army L-18C), PA-19S	All		•	•					•							
PA-20, PA-20 "115", PA-20 "135", PA-20S	All		•	•												
PA-20S "115", PA-20S "135", PA-22, PA-22-108,135,150, 160, PA-22S-135,150,160	All		•	•					•							
PA-23, PA-23-160, 235,250, -E23-250	All		•	•					•							
PA-24	24-1 thru 24-2298		•	•					•							
PA-25	All		•	•					•							
PA-25-235, PA-25-260	25-7405573 thru 25-8156024		•	•					•							
PA-28-140,150,151,160,S-160,161,180,R-180,S-180,181,R-200,RT201, RT201T, 236	All		•	•					•							
PA-28-235	All		•						•							
PA-28-201T, PA-28R-201, PA-28R-201T, PA-38-112	All		•	•					•							
Robinson																
R22, R44, R44II	All		•	•					•							
Rockwell (Commander Aircraft)																
112	3 thru 220		•	•												
Stinson																
108, 108-1	All				•	•										
108-2, 108-3	All											•	•			
Swift																
GC-1A,1B	All				•			•								
Taylorcraft																
BC, BC12-65, BC12-D, BC12-D1,BC12-D85, BC-65, BCS, BCS12-D, BCS12-D1, BCS12D-85, BCS12D-4-85, BCS12-65, BCS-65, DCI-65	All		•	•					•							
DC-65, DF-65, DL-65, DCO-65, F19, F21	All		•	•												

[1] Partial Model Eligibility
[2] Use Bracket P/N SA3-07
[3] Use Bracket P/N SA3-11
[4] Must use consolidated gascolator P/N 5221
[5] Systems with ⅜" fuel lines use SA3-00. Systems with ½" fuel lines use SA3-10-C.

Improved Fuel Strainer Seal Kits for Piper Aircraft

Better seal at half the price!

Each kit includes both the upper and lower seal for one fuel strainer. Parts also available individually.

PA-23 and PA-44 Series: Kit P/N FSP-KT-1

Replace leaky copper crush seals with high performance Stat-O-Seals

McFarlane has FAA-PMA approval to replace the high priced P/N 753-205 copper crush gaskets on the Aztec, Apaches and Seminoles with stainless steel/fluorocarbon Stat-O-Seals. The old copper crush gaskets were unreliable and poorly suited for sealing against the small lip on the bottom of the fuel bowl. They often required several attempts to get a satisfactory seal (expensive at $12 per seal). With McFarlane's improved Viton Stat-O-Seal design ***a positive seal is easy to achieve!*** Kit also includes P/N MC751-882 upper gasket.

Graphics not to scale

P/N 753-205 Copper Crush Gasket

FSP-KT-1
P/N MC751-882 Upper Gasket and
P/N MC753-205 Lower Stat-O-Seal

PA-31, PA-34, PA-36, and PA-46 Series: Kit P/N FSP-KT-2

Fuel Proof O-Rings and Stat-O-Seals

Improved FAA-PMA O-rings and Stat-O-Seals feature fuel proof fluorocarbon that won't swell or degrade like the original Buna N seals.

Graphics not to scale

FSP-KT-2
P/N MC757-255 Upper O-ring and
P/N MC751-898 Lower Stat-O-Seal

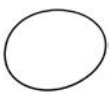
PA-24, PA-28-235, PA-30, PA-32, and PA-39 Series: Kit P/Ns FSP-KT-3 and FSP-KT-4

Fuel Bowl Gasket and O-Rings

FSP-KT-3 replaces P/N 751-871 upper gasket and MS29513-008 (supersedes Piper P/Ns 755-919, 485-331, and 485-332) lower seal O-ring used on most of these aircraft. However, some PA-28-235 and PA-32 series aircraft use a newer style fuel strainer that use a MS29513-043 (supersedes Piper P/Ns 762-503 and 483-330) O-ring for an upper seal instead of the 751-871 gasket. These aircraft must use P/N FSP-KT-4.
Kits contain FAA-PMA gaskets and standard O-rings. These kits include the correct O-rings per Piper Service Bulletin 1198A.

Gasket
P/N CA751-871

P/N MS29513-008 O-ring



P/N MS29513-043 O-ring

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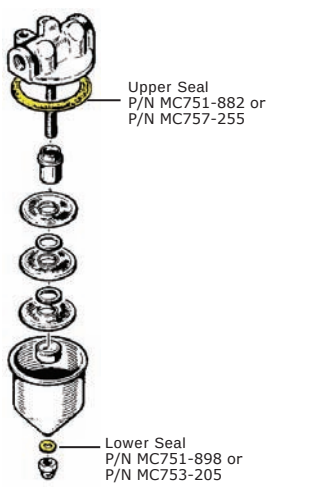
FSP-KT-3
P/N CA751-871 Gasket and
P/N MS29513-008 O-ring

FSP-KT-4
P/N MS29513-043 O-ring and
P/N MS29513-008 O-ring

PA-28 Series (except PA-28-235): P/N CA462-049

Fuel Strainer/Gascolator Gasket

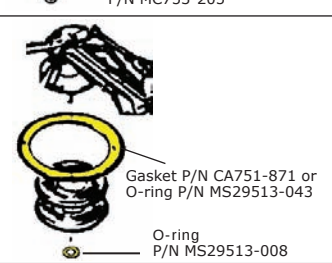
FAA-PMA approved direct replacement for Piper P/N 462-049.
P/N CA462-049 not recommended to be used with autogas.



Upper Seal
P/N MC751-882 or
P/N MC757-255

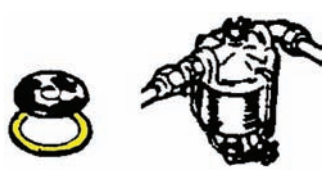
Lower Seal
P/N MC751-898 or
P/N MC753-205

Aircraft Model	Serial Number	Gasket/O-ring Upper Seal P/N	Gasket/O-ring Lower Seal P/N	Kit P/N
PA-23-235, 250	All	MC751-882	MC753-205	FSP-KT-1
PA-E23-250	All	MC751-882	MC753-205	FSP-KT-1
PA-24-400	All	CA751-871	MS29513-008	FSP-KT-3
PA-28-140, 150, 160, 180	All	CA462-049	N/A	N/A
PA-28-151, 161	All	CA462-049	N/A	N/A
PA-28-181	28-7690001 thru 28-7990626 and 28-8090001 thru 28-8690062	CA462-049	N/A	N/A
PA-28-201T	All	CA462-049	N/A	N/A
PA-28-235	All	CA751-871 (gasket) or MS29513-043 (O-ring)	MS29513-008	FSP-KT-3 (gasket) FSP-KT-4 (O-ring)
PA-28-236	All	CA462-049	N/A	N/A
PA-28R-180	All	CA462-049	N/A	N/A
PA-28R-200	All	CA462-049	N/A	N/A
PA-28R-201, 201T	All	CA462-049	N/A	N/A
PA-28RT-201, 201T	All	CA462-049	N/A	N/A
PA-30	All	CA751-871	MS29513-008	FSP-KT-3
PA-31	All	MC757-255	MC751-898	FSP-KT-2
PA-31-300	All	MC757-255	MC751-898	FSP-KT-2
PA-31-325	All	MC757-255	MC751-898	FSP-KT-2
PA-31-350, 350 (T1020)	All	MC757-255	MC751-898	FSP-KT-2
PA-31P, 350	All	MC757-255	MC751-898	FSP-KT-2
PA-32-260	All	CA751-871 (gasket) or MS29513-043 (O-ring)	MS29513-008	FSP-KT-3 (gasket) FSP-KT-4 (O-ring)
PA-32-300	All	CA751-871 (gasket) or MS29513-043 (O-ring)	MS29513-008	FSP-KT-3 (gasket) FSP-KT-4 (O-ring)
PA-34-200T, 220T	All	MC757-255	MC751-898	FSP-KT-2
PA-36-285, 300, 375	All	MC757-255	MC751-898	FSP-KT-2
PA-38-112	All	CA462-049	N/A	N/A
PA-39	All	CA751-871	MS29513-008	FSP-KT-3
PA-44-180, 180T	All	MC751-882	MC753-205	FSP-KT-1
PA-46-310P, 350P	All when equipped with filter assembly 561-046 or 599-180 (Air Maze)	MC757-255	MC751-898	FSP-KT-2
PA-46R-350T	All when equipped with filter assembly 561-046 or 599-180 (Air Maze)	MC757-255	MC751-898	FSP-KT-2



Gasket P/N CA751-871 or
O-ring P/N MS29513-043

O-ring
P/N MS29513-008



Gasket
P/N CA462-049

Fuel and Oil Quick Drain Valves

Save! Large Selection, Low Price

- Simple operation - spring load close
- FAA-PMA, FAA-TSO-C76 or MIL-SPEC approved
- A clean no mess way to test and drain fuel or oil

Many new valves from Curtis and SAF-AIR!

P/N SA187

P/N P5000

P/N 1250

P/N CCA-4300

SAF-AIR Aviation Products

SAF-AIR has produced high quality close-tolerance valves since 1959. They are unique because their valves have replaceable O-rings.

- Unique O-ring placement prevents leaks by eliminating an area where dirt can gather.
- O-rings can be replaced instead of buying a new valve.
- Seal kits available

Curtis Superior Valve Co. Inc.

Curtis has produced, engineered, manufactured, and tested aircraft valves to exacting standards since 1944. They have over forty standard valves to solve a wide range of problems.

- Corrosion resistant, stainless steel springs
- Specially compounded "cure dated" synthetic rubber seals to withstand a wide variety of liquids over a broad temperature range.
- Unique wedge seal design prevents leakage

P/N CCA-2460

P/N CAV-160

P/N CCB-36450

P/N SA82

Fuel Drain Valve Selection Table

Thread: "UNF" (Fine thread) type are straight, non-sealing threads that rely on an O-ring to provide a seal. "NPT" (Pipe Thread) type are tapered threads that seal as they are tightened. Measure the O.D. of the thread on the valve you are replacing and compare to the thread specifications table on page 57 to determine the correct thread size.
Locking: Indicated valves lock in the open position for easy draining.
Flush mounted: Indicated valves are designed to mount flush with aircraft skin.
Use Pin Type Cup: Pin type cups similar to P/N CCA-39680 or MCCCA-39680 may be used with indicated valves for sampling fuel.
Open Action: "Spiral" valves require a push and turn action to open, "Push" valves require a push action to open.
Hose Adapter Size: A hose may be attached to the indicated valves for ease of draining fuel. The size indicated is the hose I.D.

Thread	Locking	Flush Mounted	Use Pin Type Cup	Open Action	Hose Adapter Size	Material	Approval Type and Conformity Notes	OEM	Part Number and Notes	See Figure on pg 56	Alternate P/Ns
	•		•	Push	1/2"	360 Brass	FAA-TSO-C76	SAF-AIR	C500 3	22	CCA-3400
	•			Spiral	1/2"	Brass, Unplated	FAA-TSO-C76 9	Curtis	CCA-3400	59	C500
1/8 NPT						360 Brass	FAA-TSO-C76	SAF-AIR	B187	21	
1/8 NPT				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-110H-4 1	24	BJ1000AH1
1/8 NPT				Spiral		Brass, Cad Plate	FAA-TSO-C76 3	Curtis	CCA-36150	61	BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-110 1	23	BJ1000AS1MY, CCA-1250, CCA-1550, CCA-36150, CCA-7450, CCB-36700
1/8 NPT			•	Push		Brass, Cad Plate	FAA-TSO-C76 2	Curtis	CCB-36700	90	BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		Brass, Unplated	FAA-TSO-C76 8	Curtis	CCA-1800 1	44	CAV-110, BJ1000AS1MY
1/8 NPT			•	Push		303 SS	Experimental	SAF-AIR	110SS	2	
1/8 NPT			•	Push	1/4"	303 SS	Experimental	SAF-AIR	110HSS	1	
1/8 NPT		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA18 14	113	491-806, CCA-2500, F391-18, S2106-3
1/8 NPT		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA187 14	114	491-806, CCA-250, F391-187, S2106-3
1/8 NPT		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2500 7	53	491-806, F391-187B, F391-88, S2106-3, SA-18, SA-187
1/8 NPT	•			Push		Brass, Unplated	FAA-TSO-C76 3	Curtis	CCA-1550	40	1250, 492-100, 492-022, BJ1000AS1MY, BJ1000A-1, CAV-110
1/8 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	1250 1	9	BJ1000A-1,CCA-1250, CCA-1550, CCA-7450
1/8 NPT	•			Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	1250H 1	10	BJ1000AH1
1/8 NPT	•			Spiral		Anodized/Aluminum	Experimental	Curtis	CCA-1100 12	33	
1/8 NPT	•			Spiral		Anodized/Aluminum	FAA-TSO-C76	Curtis	CCA-1150	34	
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 3	Curtis	CCA-4850	70	1250, 492-100, 492-022, BJ1000A-1
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 3	Curtis	CCA-7450 6	78	BJ1000AS1MY, CAV-110, CCA-1250
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 3	Curtis	CCA-9950 7	84	
1/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76 3	Curtis	CCA-1250	36	1250, 492-100, 492-022, BJ1000A-1, BJ1000AS1MY, CAV-110
1/8 NPT	•			Spiral		Stainless Steel	FAA-TSO-C76 3	Curtis	CCB-36750 7	91	1250, 492-100, 492-022, BJ1000A-1, BJ1000A-2
1/4 NPT				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-160H-4 1	26	BJ1000AH2
1/4 NPT			•	Push		303 SS	Experimental	SAF-AIR	160SS	4	
1/4 NPT			•	Push	1/4"	303 SS	Experimental	SAF-AIR	160HSS	3	
1/4 NPT			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-160 1	25	BJ1000AS1MX, CCA-1300, CCA-1600, CCA-4900
1/4 NPT			•	Push		Brass, Unplated	FAA-TSO-C76 8	Curtis	CCA-1900 1	45	CAV-160, BJ1000AS1MX
1/4 NPT			•	Push		304 Stainless	FAA-TSO-C76	SAF-AIR	SA-60S	119	
1/4 NPT		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA14	112	CCA-2600, F391-14
1/4 NPT		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2600 7	54	F391-14,SA-14
1/4 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	2500 1	11	BJ1000A-2, CCA-1300, CCA-1600, CCA-4900
1/4 NPT	•			Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	2500H 1	12	BJ1000AH2
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO-C76 4	Curtis	CCA-3600	60	
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO-C76 4	Curtis	CCA-4800 7	69	
1/4 NPT	•			Push		Brass, Unplated	FAA-TSO-C76 4	Curtis	CCA-1600	41	2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 4	Curtis	CCA-4900	71	2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76 4	Curtis	CCA-1300	37	2500, BJ1000A-2
1/4 NPT	•			Spiral		Stainless Steel	FAA-TSO-C76 4	Curtis	CCA-39000	63	
3/8 NPT	•			Push		Brass, Unplated	FAA-TSO-C76 5	Curtis	CCA-1650	42	BJ1000A-3, P3750
3/8 NPT	•			Push		Anodized/Aluminum	None 12	Curtis	CCA-7000	77	
3/8 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	P3750 1	105	
3/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 5	Curtis	CCA-4950	72	BJ1000A-3, P3750
3/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76 5	Curtis	CCA-1350	38	
3/8-24 UNF			•	Push		303 SS	Experimental	SAF-AIR	180SS	8	
3/8-24 UNF			•	Push	1/4"	303 SS	Experimental	SAF-AIR	180HSS	7	
3/8-24 UNF			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-180 1	29	1100B52Z
3/8-24 UNF				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-180H-4 1	30	

Continued on the next page

Fuel Drain Valve Selection Table (continued from previous page)

Thread	Locking Type	Flush Mounted Type	Use Pin Type Cup	Open Action	Hose Adapter Size	Material	Approval Type and Conformity Notes	OEM	P/N and Notes	See Figure on pg 56	Alternate P/Ns
3/8-24 UNF			•	Push		Brass, Unplated	FAA-TSO-C76 8	Curtis	CCA-2000 1	46	CAV-180, 1100B52Z
3/8-24 UNF		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA32	115	CCA-2700, F391-32, S2106-1
3/8-24 UNF		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2700 7	55	F391-32, S2106-1, SA-32
3/8-24 UNF	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	3750 1	13	
3/8-24 UNF	•			Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	3750H 1	14	
1/2-20 UNF		•	•	Push		Aluminum Anodized	FAA-PMA	SAF-AIR	SA5020	116	3651-00
1/2-20 UNF		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA82 15	121	C100360, CCA-2900, F391-82, S2020-1
1/2-20 UNF		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2900 7	57	C100360, F391-82, S2020-2,SA-82
1/2 NPT	•			Push		Brass, Unplated	FAA-TSO-C76 1	Curtis	CCA-1700 7	43	
1/2 NPT	•			Push	3/8"	Brass, Unplated	FAA-PMA 2	Curtis	CCB-37000 7	92	
1/2 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76 1	Curtis	CCA-1400 7	39	
5/8-18 UNF	•			Spiral		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-39550 7	65	
5/8-18 UNF	•			Spiral	3/8"	Brass, Unplated	None 12	Curtis	CCA-39560 7	66	
3/4-16 UNF		•	•	Push		Aluminum Anodized	FAA-TSO-C76	SAF-AIR	F75 3	101	
3/4-16 UNF		•		Push		Aluminum Anodized	Experimental	Curtis	CCA-1200 *New!*	35	SA5817-4C, 710C-4
3/4-16 UNF		•		Push		Aluminum Anodized	FAA-TSO-C76	SAF-AIR	SA5817-4C 4	118	CCA-1200, 710C-4
3/4-16 UNF		•		Spiral		Aluminum Anodized	10	Curtis	CCB-36350-1	87	971D, 971D-1, F75
3/4-16 UNF	•	•		Push		Alodine/Aluminum	FAA-TSO-C76 12	Curtis	CCB-36450	88	
3/4-16 UNF	•	•		Push		Aluminum Anodized	10	Curtis	CCB-36450-5 13	89	
3/4-16 UNF	•	•		Push		Aluminum/Nylon	FAA-TSO-C76 10	Curtis	CCB-37500 13	93	
3/4-16 UNF	•	•		Spiral		Aluminum Anodized	10	Curtis	CCA-7500 10 11	79	
3/4-16 UNF	•	•		Spiral		Aluminum Anodized	10	Curtis	CCA-7500-1 10	80	
3/4-16 UNF	•	•		Spiral		Aluminum Anodized	10	Curtis	CCA-7500-2 10 12	81	
3/4-16 UNF	•	•		Spiral		Aluminum Anodized	None 12	Curtis	CCA-7600 12	83	
3/4-16 UNF	•	•		Spiral		Aluminum Anodized	10	Curtis	CCA-7500-5 10	82	
7/16-20 UNF				Push		Aluminum Anodized	FAA-TSO-C76	SAF-AIR	4350-6L 2	15	
7/16-20 UNF				Push		Brass, Cad Plate	FAA-TSO-C76 7	Curtis	CCB-4320 8	95	110B52Z-G, CAV-170
7/16-20 UNF				Push		Brass, Cad Plate	FAA-TSO-C76 7	Curtis	CCA-5800-3 7	75	110B52Z-G, CAV-170
7/16-20 UNF				Push		Anodized Aluminum	Experimental	Curtis	CCA-39680 *New!*	N/A	SA5817-4C
7/16-20 UNF				Spiral		Brass, Cad Plate	FAA-TSO-C76 7	Curtis	CCA-5800-1 7	74	110B52Z-G, CAV-170
7/16-20 UNF			•	Push		303 SS	Experimental	SAF-AIR	170SS	6	
7/16-20 UNF			•	Push	1/4"	303 SS	Experimental	SAF-AIR	170HSS	5	
7/16-20 UNF			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-170 1	27	110B52ZG, CCA-4300, CCA-5800-1, CCA-5800-3, CCB-4320
7/16-20 UNF				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-170H-4 1	28	BJ1000AHS-1
7/16-20 UNF			•	Push		Brass, Unplated	FAA-TSO-C76 8	Curtis	CCA-2100 1	47	CAV-170, 110B52ZG
7/16-20 UNF		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA53S 15	117	F391-53S
7/16-20 UNF		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA72	120	CCA-2800, F391-72, S2106-2
7/16-20 UNF		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2800 7	56	F391-72, S2106-2, SA-72
7/16-20 UNF	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	4375 1	16	71D-4, BJ1000AS1M, CCA-4300, CCA-5800-1
7/16-20 UNF	•			Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	4375H 1	17	BJ1000AHS1, CCA-5400
7/16-20 UNF	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 7	Curtis	CCA-4300 7	67	110B52Z-G, 4375, 71D-4, BJ1000AS1M, CAV-170, CCA-5800-1
7/16-20 UNF	•			Spiral	1/4"	Brass, Cad Plate	FAA-TSO-C76 9	Curtis	CCA-5400 7	73	4375H, BK1000AHS1
9/16-18 UNF				Push		Alum. Anodized	Experimental	SAF-AIR	A5625	19	
9/16-18 UNF				Push		Brass, Cad Plate	FAA-TSO-C76 8	Curtis	CCA-31300 7	58	
9/16-18 UNF				Push		Alum. Anodized Red	FAA-TSO-C76 8	Curtis	CCA-39500	64	
9/16-18 UNF				Sprial		Brass, Cad Plate	FAA-TSO-C76 8	Curtis	CCA-36400 7	62	
9/16-18 UNF	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 8	Curtis	CCA-4350 9	68	
9/16-18 UNF	•			Spiral		Brass, Cad Plate	FAA-TSO-C76 11	Curtis	CCA-6000 7	76	
M16x1.5			•	Push		360 Brass	Experimental	SAF-AIR	CAV-2165	31	Soccata TB-20
M16x1.6			•	Push		360 Brass	Experimental	SAF-AIR	CAV-M165H5	32	

Part Notes:
1. Replacement O-rings: see tables to the right
2. Stem can be cut to length per the application
3. Used on bladder style wing tanks
4. Hose attaches to the valve with a 7/16-20 flare fitting
5. Can be used in highly corrosive applications such as salt water.
6. One arm stem with turn-to-lock action
7. Lock wire drilled
8. Button-style push action
9. With stem for turning action
10. With screwdriver slot
11. With screen over screwdriver slot and mounting hardware
12. With mounting hardware (washer & two nuts installed)
13. Meets lightning safety requirement Mil-C-38373, Paragraph 4.6.14
14. P/N SA18 has a hex size of 5/8". P/N SA187 has a hex size of 1/2".
15. Valve inlet is below the threads and O-ring seals against hex face. See fig. 117 on pg 56.

Conformity Notes:
1. Conforms to USAF Spec 28208
2. Conforms to USAF Spec 49F9798-49
3. Conforms to USAF Spec 28208 and 49F9798-49
4. Conforms to USAF Spec 28208 and 49F9798-50
5. Conforms to USAF Spec 28208 and 49F9798-51
6. Conforms to USAF Spec 28208, 49F9798-53 and MIL-V-25023
7. Conforms to USAF Spec 28208, 49F9798-52, MIL-V-25023 and MS29528-4
8. Conforms to USAF Spec 28208, 49F9798-53, MIL-V-25023 and MS29528-6
9. Conforms to USAF Spec 28208 and MIL-V-25023
10. Conforms to USAF Spec 28208, MIL-V-25023 and MS29571
11. Conforms to USAF Spec 49F9798-53 and MIL-V-25023
12. For non-certified aircraft only

Curtis Fuel Sampling Cup with McFarlane Logo

P/N MCCCA-39680

- Stainless steel pin, and fuel resistant crystal clear plastic
- Convenient no-mess method of draining fuel to inspect for proper grade and contaminants
- Works with any quick drain valve designed for a pin type cup. Pin diameter is 1/8".

Replacement Seals

SAF-AIR Seal Kits

Add "K" or "-K" to the valve P/N to get the P/N for the applicable seal kit. Seal kits only applicable for SAF-AIR valves with note 1 above.

Curtis Field Replaceable O-rings — Fuel Valve P/N	P/N MS29513-007 Stem Seal O-ring	P/N MS29513-011 Mounting O-ring	P/N MS29513-012 Mounting O-ring
CCA-1800	•		
CCA-1900	•		
CCA-2000	•	•	
CCA-2100	•		•

PMA Products Seals for Curtis Valves

PMA Products, Inc.

FAA-PMA Approved

Seal P/N	Valve P/N	Aircraft	Serial Number
CACCA1269	CCA-4850	B55	TC-1608 thru TC-2071
		E55	TE-938, TE-943 thru TE-1102
		58	TH-1 thru TH-2124
CACCA1319	CCA-3400	B55	TC-1608 and On
		E55	TE-938, TE-943 and On
		58	TH-1 thru TH-2124

Use with autogas not recommended.
Manufactured by PMA Products Inc.

Part Number	ID	OD	Thickness
CACCA1269	.100	.280 - .285	.064 - .068
CACCA1319	.150	.350	.058

Dimensions are in inches

Flush Valve Fuel Plate

Supports applications where added stability is needed to mount a flush mount valve directly into a wet wing or fuel tank. CCB-36450-5 flush mounted fuel drain valve is included.

- 2¾" Overall Diameter
- 1½" from mounting surface to bottom hole diameter

P/N	Description
PLT-275V	Flush Valve Fuel Plate without mounting holes. Includes CCB-36450-5 flush mounted drain valve. Non certified aircraft only.
PLT-275AV	Flush Valve Fuel Plate with mounting holes drilled. Includes CCB-36450-5 flush mounted drain valve. Non certified aircraft only.

Figures 1-107 Photos are not to scale relative to each other

1  **110HSS** 1/8 NPT	2  **110SS** 1/8 NPT	3  **160HSS** 1/4 NPT	4  **160SS** 1/4 NPT	5  **170HSS** 7/16-20 UNF	6  **170SS** 7/16-20 UNF	7  **180HSS** 3/8-24 UNF	8  **180SS** 3/8-24 UNF	9  **1250** 1/8 NPT	10  **1250H** 1/8 NPT	11  **2500** 1/4 NPT	12  **2500H** 1/4 NPT	13  **3750** 3/8-24 UNF	14  **3750H** 3/8-24 UNF	15  **4350-6L** 7/16-20 UNF
16  **4375** 7/16-20 UNF	17  **4375H** 7/16-20 UNF	18  **A5020** 1/2-20 UNF	19  **A5625** 9/16-18 UNF	20  **A62-INV** 5/8-18 UNF	21  **B187**	22  **C500**	23  **CAV-110** 1/8 NPT	24  **CAV-110H-4** 1/8 NPT	25  **CAV-160** 1/4 NPT	26  **CAV-160H-4** 1/4 NPT	27  **CAV-170** 7/16-20 UNF	28  **CAV-170H-4** 7/16-20 UNF	29  **CAV-180** 3/8-24 UNF	30  **CAV-180H-4** 3/8-24 UNF
31  **CAV-2165** M16x1.6	32  **CAV-M165H5** M16x1.6	33  **CCA-1100** 1/8 NPT	34  **CCA-1150** 1/8 NPT	35  **CCA-1200** 3/4-16 UNF	36  **CCA-1250** 1/8 NPT	37  **CCA-1300** 1/4 NPT	38  **CCA-1350** 3/8 NPT	39  **CCA-1400** 1/2 NPT	40  **CCA-1550** 1/8 NPT	41 **CCA-1600** 1/4 NPT	42 **CCA-1650** 3/8 NPT	43 **CCA-1700** 1/2 NPT	44 **CCA-1800** 1/8 NPT	45 **CCA-1900** 1/4 NPT
46 **CCA-2000** 3/8-24 UNF	47 **CCA-2100** 7/16-20 UNF	48 **CCA-2440** 14MM 1.50	49 **CCA-2450** 12MM 1.75	50 **CCA-2460** 1/2-20 UNF	51 **CCA-2475** 12MM 1.75	52 **CCA-2485** 1/2-20 UNF	53 **CCA-2500** 1/8 NPT	54 **CCA-2600** 1/4 NPT	55 **CCA-2700** 3/8-24 UNF	56 **CCA-2800** 7/16-20 UNF	57 **CCA-2900** 1/2-20 UNF	58 **CCA-31300** 9/16-18 UNF	59 **CCA-3400**	60 **CCA-3600** 1/4 NPT
61 **CCA-36150** 1/8 NPT	62 **CCA-36400** 9/16-18 UNF	63 **CCA-39000** 1/4 NPT	64 **CCA-39500** 9/16-18 UNF	65 **CCA-39550** 5/8-18 UNF	66 **CCA-39560** 5/8-18 UNF	67 **CCA-4300** 7/16-20 UNF	68 **CCA-4350** 9/16-18 UNF	69 **CCA-4800** 1/4 NPT	70 **CCA-4850** 1/8 NPT	71 **CCA-4900** 1/4 NPT	72 **CCA-4950** 3/8 NPT	73 **CCA-5400** 7/16-20 UNF	74 **CCA-5800-1** 7/16-20 UNF	75 **CCA-5800-3** 7/16-20 UNF
76 **CCA-6000** 9/16-18 UNF	77 **CCA-7000** 3/8 NPT	78 **CCA-7450** 1/8 NPT	79 **CCA-7500** 3/4-16 UNF	80 **CCA-7500-1** 3/4-16 UNF	81 **CCA-7500-2** 3/4-16 UNF	82 **CCA-7500-5** 3/4-16 UNF	83 **CCA-7600** 3/4-16 UNF	84 **CCA-9950** 1/8 NPT	85 **CCB-33000** 5/8-18 UNF	86 **CCB-36000H** 1/2-14 NPT	87 **CCB-36350-1** 3/4-16 UNF	88 **CCB-36450** 3/4-16 UNF	89 **CCB-36450-5** 3/4-16 UNF	90 **CCB-36700** 1/8 NPT
91 **CCB-36750** 1/8 NPT	92 **CCB-37000** 1/2 NPT	93 **CCB-37500** 3/4-16 UNF	94 **CCB-38000** 1/2 NPT	95 **CCB-4320** 7/16-20 UNF	96 **F10** 1"-18 UNF	97 **F167** 3/4-16 UNF	98 **F175** 3/4-14 NPT	99 **F50** 1/2-14 NPT	100 **F62** 5/8-18 UNF	101 **F75** 3/4-16 UNF	102 **M12175** 12MM 1.75	103 **M14150** 14MM 1.50	104 **M20150** 20MM 1.50	105 **P3750** 3/8 NPT
106 **P5000** 1/2-14 NPT	107 **P7500** 3/4-14 NPT	108 **S1000** 1"-18 UNF	109 **S5020J** 1/2-20 UNF	110 **S6250** 5/8-18 UNF	111 **S7516** 3/4-16 UNF	112 **SA14** 1/4 NPT	113 **SA18** 1/8 NPT	114 **SA187** 1/8 NPT	115 **SA32** 3/8-24 UNF	116 **SA5020** 1/2-20 UNF	117 **SA53S** 7/16-20 UNF	118 **SA5817-4C** 3/4-16 UNF	119 **SA-60S** 1/4 NPT	120 **SA72** 7/16-20 UNF
121 **SA82** 1/2-20 UNF														

Locking Oil Drain Valves

Feature a detent to lock in the open position.

Oil Drain Valves Selection Guide

Thread: "UNF" (Fine thread) type are straight, non-sealing threads that rely on an O-ring to provide a seal. "NPT" (Pipe Thread) type are tapered threads that seal as they are tightened. Others are metric threads. Measure the O.D. of the thread on the valve you are replacing and compare to the thread specification table in maintenance tips to determine the correct thread size.

Open Action: Spiral valves require a push and turn action to open.

Hose Adapter: A hose adapter may be attached to the indicated valves for ease of draining. The size indicates the hose I.D.


P/N CCA-2460


P/N S6250

Thread	Open Action	Hose Adapter Size	Material	Approval	OEM	Part Number	See Figure on pg 56
1/2-14 NPT	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	P5000 3	106
1/2-14 NPT	Push		Aluminum	None 6	Curtis	CCB-38000	94
1/2-14 NPT	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F50 3 5	99
1/2-14 NPT	Push		Aluminum	None 6	Curtis	CCB-36000H *New!*	86
1/2-20 UNF		3/8"		None 6	SAF-AIR	A5020 3	18
1/2-20 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S5020J 3	109
1/2-20 UNF	Sprial	3/8"	Brass, Unplated	None 6	Curtis	CCA-2460	50
1/2-20 UNF	Spiral	3/8"	Brass, Unplated	None 6	Curtis	CCA-2485 2	52
3/4-14 NPT	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	P7500 3	107
3/4-14 NPT	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F175 3	98
3/4-16 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S7516 3	111
3/4-16 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F167 3	97
5/8-18 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S6250 3	110
5/8-18 UNF		3/8"	2011 Aluminum, 302 Stainless	None 6	SAF-AIR	A62-INV 4	20
5/8-18 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F62 3 5	100
5/8-18 UNF	Push	3/8"	Aluminum	None 6	Curtis	CCB-33000 *New!*	85
1"-18 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S1000 3	108
1"-18 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F10 3 5	96
12MM 1.75	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	M12175 3	102
12MM 1.75	Spiral	3/8"	Brass, Unplated	None 6	Curtis	CCA-2450	49
12MM 1.75	Spiral	3/8"	Brass, Unplated	None 6	Curtis	CCA-2475 1	51
14MM 1.50	Spiral	3/8"	Brass, Unplated	None 6	Curtis	CCA-2440	48
20MM 1.50	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	M20150 3	104
		3/8"	2011 Aluminum, 302 Stainless	7	SAF-AIR	M14150 3	103

1 Includes P/N CCA-2450 valve and P/N CCA-2470 adapter
2 Includes P/N CCA-2460 valve and P/N CCA-2480 adapter
3 Replacement o-ring kits available. Add "K" or "-K" to valve part number.
4 Used with AN6, AN8 and AN10 adapters to replace a cap. The valve and adapter are sold together.
5 Two piece, low profile valve. P/N F50-90 opener that attaches straight out of the valve is included. P/N F50-90 opener which attaches at a 90 angle is also available.
6 For non-certified aircraft only
7 For use on UL engines

Oil Drain Valve Adapters and Openers

Used with CCA-2450 and CCA-2460 oil drain valves to adapt to Rotax and Jabiru engines. Adapters are for non-certified aircraft only.


P/N CCA-2470
P/N CCA-2480


P/N CCA-2474


P/N F50-90


P/N F50-180


P/N RM12175

P/N	Thread	Material	Description
AN6-INV *New!*		2011 Aluminum	Christen inverted oil system
AN8-INV *New!*		2011 Aluminum	Christen inverted oil system
AN10-INV *New!*		2011 Aluminum	Christen inverted oil system
CCA-2470	12MM 1.75	Aluminum	Rotax 90-Degree adapter for CCA-2450 oil drain valve
CCA-2474 *New!*	12MM 1.75	Aluminum	Rotax oil tank adapter for late models with CCA-2450 oil drain valve
CCA-2480	1/2-20 UNF	Aluminum	Jabiru 90-Degree adapter for CCA-2460 oil drain valve
F50-90			Opener - attaches at a 90 degree angle from valve.
F50-180			Opener - attaches straight out of the valve.
M1290B *New!*	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Rotax for S5020J oil drain valve
M1490B *New!*	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Volkswagen for S5020J oil drain valve
RM12175 *New!*		2011 Aluminum	Rotax, Oil must be used on all new oil tanks being produced by Rotax as they changed the internal design on the tank requiring an adapter to use an oil drain valve.
S5090B *New!*	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Jabiru for S5020J oil drain valve
S6290B *New!*	5/8-18 UNF	2011 Aluminum	Banjo Bolt, Continental for S6250 oil drain valve

Installation Sockets

Used to torque valves to desired specifications and also prevents valve damage upon installation and removal.


P/N CST-916

P/N		For use with valve P/N
CST-78	Fits all 7/8 Hex Valves	CCA-1400, CCA-1700, CCB-37000, CCA-39550, CCA-39560
CST-716	Fits all 7/16 Hex Valves	CCA-1250, CCA-1550, CCA-4850, CCA-7450, CCA-9950, CCA-36150, CCB-36750
CST-916	Fits all 9/16 Hex Valves	CCA-1300, CCA-1600, CCA-3600, CCA-4800, CCA-4900, CCA-39000
CST-1116	Fits all 11/16 Hex Valves	CCA-1350, CCA-1650, CCA-2440, CCA-2450, CCA-2460, CCB-4320, CCA-4950, CCA-5400, CCA-5800-1
CST-36450	For removal of certain Curtis flush mounted valves	CCB-36450, CCB-36450-5

Maintenance Tips:

Curtis Superior and SAF-AIR valves are designed for installation in a standard NPT port for NPT threaded valves or an AND-10050 style port for UNF threaded valves. Use a sealant on NPT threaded valves or a fuel resistant O-ring of the proper size for UNF threaded valves. Refer to aircraft manufacturer's torque specifications for the aircraft in which it is being used or to the torque specifications in the table below for Curtis valves.

Replace the rubber seals as per the aircraft manufacturer's recommendations or every ten years when no guidance is given. McFarlane stocks replacement seals and seal kits for both Curtis Superior and SAF-AIR. The new Curtis valves use a O-ring type seal instead of the flat seal that was previously used.

SAF-AIR valves are designed to be disassembled and the O-rings replaced. Over time, if the valve should start to leak, check to make sure the drain valve is tight. If drain valve is found to be tight, then check the O-rings. All O-rings used are buna "n", MS29513 Style, MIL-P-5315. SAF-AIR O-ring seal kits are available for most of their valves. Add a "K" or "-K" suffix to the valve part number.

Never have a hose attached in flight to the oil drain valve. Engine vibration and the additional attached mass can cause premature seal and valve wear which could result in valve failure and a loss of engine oil.

Thread Specifications		
Thread O.D.	**Thread**	**Curtis Torque Spec**
0.375	3/8-24 UNF	80-85 In. Lbs
0.405	1/8-27 NPT	40-45 In. Lbs
0.438	7/16-20 UNF	80-85 In. Lbs
0.500	1/2-20 UNF	80-85 In. Lbs
0.540	1/4-18 NPT	80-85 In. Lbs
0.563	9/16-18 UNF	80-85 In. Lbs
0.625	5/8-18 UNF	100-115 In. Lbs
0.675	3/8-18 NPT	105-115 In. Lbs
0.750	3/4-16 UNF	80-85 In. Lbs
0.840	1/2-14 NPT	155-165 In. Lbs
Special Threads with Crush Washers		
Valve P/N	**Thread**	**Curtis Torque Spec**
CCA-2450	12MM 1.75	60-75 In. Lbs
CCA-2460	1/2-20	60-70 In. Lbs
CCA-2470	12MM 1.75	60-70 In. Lbs
CCA-2480	12-50	60-70 In. Lbs

Quick Drain Hoses

Curtis Quick Drain Hoses are designed to work with the Curtis Quick Drain Valves. In most cases, a simple push and twist action locks the Quick Drain Hose in place. Waste liquid flows through five feet of high grade vinyl tubing, preventing messy spills and making a safer, cleaner environment. Tubing will not harden in sub-freezing temperatures.


P/N CCB-39600-5

P/N	Connector Color	Used with Valve P/N
CCB-39600-1	Black	CCA-1400, CCA-1700, CCA-39550
CCB-39600-2	Blue	CCA-1350, CCA-2450, CCA-1650, CCA-4950
CCB-39600-3	Yellow	CCA-1300, CCA-1600, CCA-3400, CCA-3600, CCA-4800, CCA-4900, CCA-39000
CCB-39600-4	Silver	CCA-4350, CCA-36400
CCB-39600-5	Brass	CCA-1250, CCA-1550, CCA-4300, CCA-7450, CCA-9950

Manufactured by Curtis Superior Drain Co., Inc.

Electricity in the Fuel Tank.

Is it Safe?

By Dave McFarlane

Have you ever thought about those fuel quantity transmitters in your fuel tank? Just how much electricity go through them anyway? Is there any chance of a spark? Could they touch off an explosion? Could they be improved? How do they fail? These are some of the questions we had when we started to develop new FAA- PMA replacement fuel transmitters for the Cessna single engine airplanes. What we found out was quite shocking.

The first things we did were to review the aircraft electrical schematics for the fuel quantity system and dissect several fuel gages. A fuel indicating circuit was analyzed while it was working. Then we collected a lot of transmitters that were removed from service and a few new ones. Some of them still worked and some were obviously bad. After disassembly, the transmitter failure modes and defects were noted with the most common electrical defect being actual wear failure of the stainless-steel wire that is wound around a phenolic (laminated plastic) insulator board making up the variable resistor.

One particular defective transmitter caught our attention. The phenolic board was charred and discolored. This clearly indicating the stainless-steel resistor wires had been HOT! How did it get hot? There were no signs of external heat in the transmitter housing or flange that would indicate external heat or fire. Looking at and smelling this transmitter took me back twenty five years to when I ran a repair shop in Iowa. A customer brought in an almost new Cessna Agwagon that had an alternator run away due to a shorted field wire near the alternator. Before the pilot could shut down the master switch, the 28-volt system fried all the electrical components that were turned on at the time and the electrical instruments were brown and filled with smoke. I remember that the over-voltage had also damaged the fuel transmitters.

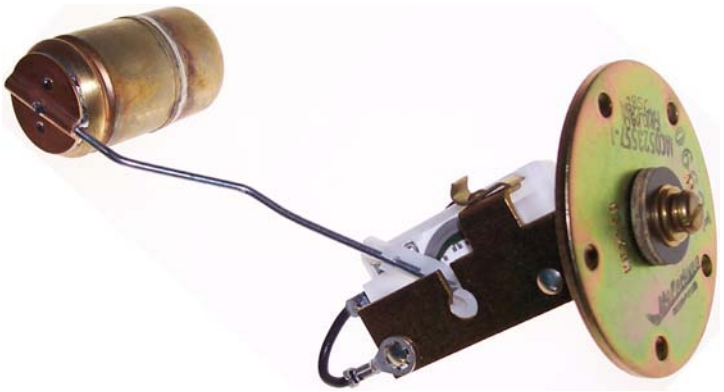
An over-voltage might explain our one hot transmitter, but Fred McClenahan, our design engineer, and I were not convinced that was the only possibility.

In the normal operating mode, there are only a few milliamps of current flowing through the fuel transmitter to ground. Buss (battery or alternator) voltage is put into the fuel quantity indicator where the fine wire instrument coils reduce the voltage going to the transmitter. The voltage and related amp flow is very small as it goes through the transmitter to the grounded fuel tank. The chance of a spark at the point of contact of the transmitter's resistor wiper arm on the stainless-steel wire is very remote.

"Our certification tests proved that it will take the vibration and other abuses of the aircraft environment."

The amp flow through the stainless steel resistive wire is so small it does not generate heat. But what happens when a malfunction occurs that would put full buss voltage directly to the transmitter? We were about to find out. Not having enough available amp power with our lab power supply, we took a good transmitter outside and lifted the hood on the company truck where we had the brute strength of a seven hundred amp Sears Die Hard®. We held the transmitter flange on the negative battery post and put a jumper wire from the positive post to the transmitter wire terminal. What I saw sent a cold chill down my spine. After a few seconds, the transmitter started to emit smoke and the stainless-steel resistor wire began to glow red hot!

Our certification tests proved that it will take the vibration and other abuses of the aircraft environment. Analyzing what this means, we determined if you had a short in the transmitter wire as it goes up the aircraft door post and this wire was shorted to another buss voltage wire, let's say the navigation light wire, you would have the same situation as we had under the Ford hood. The only difference would be that the smoke and red hot wire would be in your gas tank just before dark and maybe at six thousand feet. Another possibility for this type of failure would be if the wire going to the fuel quantity indicator was to touch the wire leaving the fuel quantity indicator, shorting buss voltage to the normally low voltage transmitter wire. If a mechanic was to accidentally short the transmitter wire to buss voltage, he better yell "IGNITION" and clear the hangar because he just switched on the fuel tank glow plug!



Why haven't we seen a lot of single engine airplanes with fuel tank fires or blown off wings? I guess it says a lot for the wiring reliability designed into our light aircraft. Another factor might be that the fuel air mixture must be correct for a gasoline explosion. If the tank was near full there is very little oxygen in the tank.

Our next question was "what can we do to eliminate this risk?" The choices were to either keep the electricity out of the tank or find a resistor that would be safe at any voltage. Keeping the electricity out of the fuel tank would be very difficult without developing a totally different fuel quantity system with heavy modifications to the fuel system itself.

"What can we do to eliminate this risk?"

Other styles of fuel tank senders were looked at and we finally discovered the new Stewart Warner® "Thick Film Ceramic" transducer technology. This resistor is built by coating a ceramic base with a hard semiconductor film. This film is then laser cut to the exact resistance needed. The beauty of this beast is that being a semiconductor it is "current limiting". In other words, applying more voltage has less effect on the number of amps that will flow through it. With limited amp flow, there is a corresponding limit to the heat that can be generated. The real test was to see how it reacted to the Sears Die-Hard®. When we duplicated our previous test at full voltage there was no heat generated at the higher resistance and about 350° F at the low resistance and the transmitter worked fine after the test.

One of the other advantages of this technology is the hard smooth and flat surface of the semiconductor. The follower arm does not have to jump over wires. Stewart Warner®'s tests show this resistor will out wear their wire wound type many times. The accuracy of the resistance inputs is improved by the laser precision and increased number of resistance divisions built into the resistor. Our certification tests proved that it will take the vibration and other abuses of the aircraft environment.

McFarlane Aviation Products has FAA-PMA transmitters for most single engine Cessna and Piper airplanes at substantial savings over the old wire wound replacements and we are developing them for other aircraft.

Fuel Quantity Transmitters for Cessna and Piper Aircraft

McFarlane fuel quantity transmitters are direct replacements for originally installed Stewart Warner type fuel quantity transmitters. Eliminates the need for expensive transmitter conversion kits that require replacement of fuel gauges and wiring. McFarlane fuel quantity transmitters are engineered to be compatible with the original fuel quantity gauge and wiring which uses time proven technology and reliability. Each McFarlane fuel quantity transmitter is manufactured using the new Stewart Warner "thick film ceramic" resistor technology. The benefits are longer life and increased accuracy. All components are thoroughly tested to ensure reliable operation.

- Save hundreds of dollars!
- More accurate and lasts longer!
- Stewart Warner thick film resistor technology
- Direct replacement for original factory installed.

Convenient Kits

Available individually or as kits including one transmitter, gasket(s) and screw/seal assemblies as applicable. (See charts below)


P/N MC0426517-1


P/N MC0523557-1


P/N MC0726110-1


P/N MC68101-02

Installation Warning:

Do not replace the Rochester fuel quantity transmitter with the Stewart Warner transmitters. The electrical function is not compatible. Stewart Warner transmitters must be used to replace Stewart Warner transmitters only. Replacing the Rochester transmitter with the Stewart Warner transmitter will result in erroneous fuel quantity indications.

Some Cessna and Piper aircraft have been modified with a Service Kit to use the Rochester fuel quantity indicating system. This modification required changing the fuel quantity gage, transmitter, and other electrical components. Do not use the McFarlane (Stewart Warner) transmitters as a replacement for these aircraft.

McFarlane transmitters for Piper aircraft are not compatible with serial numbers other than those listed in the eligibility data.

Rochester Transmitter

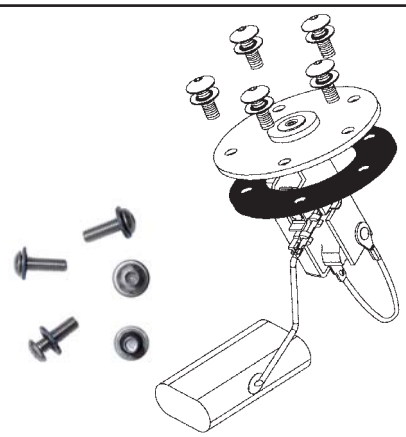
Early Style Stewart Warner Transmitter

Gaskets and Screw-Seal Assemblies for Cessna and Piper Aircraft

McFarlane fuel quantity transmitter gaskets are made from Dupont Viton®. Viton is the premier elastomer of the aerospace industry, offering flexibility and fuel resistance at all temperature extremes. Viton gaskets will not dry out or shrink like cork gaskets and do not harden with age like gaskets made from other elastomers. McFarlane gaskets are available for most single engine Cessna and Piper aircraft.

McFarlane screw-seal assemblies for Cessna aircraft have been engineered to eliminate chronic problems associated with fuel quantity transmitter hardware. Hex drive head screws made from stainless steel eliminate the corrosion process. The hex drive promotes ease of installation and eliminates the necessity for destructive down pressure during transmitter screw removal and installation. The stainless steel/Viton seal used on the hex drive screw provides a positive seal around the screw. No more leaks and seeps!

McFarlane screw-seal assemblies for Piper aircraft use the same time proven seals as our Cessna screw/seal assemblies but use a slotted screw with safety wire holes.



Fuel Transmitter Access Cover Gasket for Cessna Aircraft

P/N MC0523619-1

- Retains position and shape with an adhesive backing!
- Prevents rain and occasional fuel spill from entering the wing!
- Available separately or in fuel quantity transmitter kits FQT-KT-1 and FQT-KT-2.
- Fits most Cessna aircraft with a fuel transmitter access opening on the top of the wing.

Cessna Aircraft Eligibility for Transmitters, Gaskets and Screw-Seal Assemblies

Aircraft Model	Eligible Serial Numbers	Fuel Quantity Transmitter	Fuel Quantity Transmitter Gasket	Screw/Seal Assembly	Fuel Quantity Transmitter Kit
150 150A,B,C,D,E,F,G,H,J,K,L,M A150K,L,M F150F,G,H,J,L,M FA150K,L FRA150L,M	17001 thru 59018 15059019 thru 15079405 A1500001 thru A1500734 F1500001 thru F1500390 FA1500001 thru FA1500120 FRA1500121 thru FRA1500336	Standard Tanks MC0426517-1 [2]	MCS1588-1 MC0523619-1 (access cover gasket)	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R8 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	FQT-KT-1 [9]
150J[1] F150J[1]	15069455 thru 15071128 F1500490 thru F1500529	Patrol Tanks N/A	MCS1588-1	MCS35010R14 Replaces Cessna P/Ns S350, AN960D10L and AN52010R14 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	N/A

Eligibility continued on next page

Cessna Aircraft Eligibility for Transmitters, Gaskets and Screw-Seal Assemblies

Continued from previous page

Aircraft Model	Eligible Serial Numbers	Fuel Quantity Transmitter	Fuel Quantity Transmitter Gasket	Screw/Seal Assembly	Fuel Quantity Transmitter Kit
152 A152 F152 FA152	15279406 thru 15286033 A1520735 thru A1521049 F15201429 thru F15201980 FA1520337 thru FA1520425	Standard Tanks N/A Extended Range Tanks N/A	MCS1588-1	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R10 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	N/A
172,172A, 172B,C,D,E,F,G,H,I,J,K,L,M,N,P[1] F172D,E,F,G,H,K,L,M FR172E,F,G,H,J,K R172K FP172 P172D	36966 thru 47746 17247747 thru 17276516 F1720001 thru F17201234 FR17200001 thru FR17200675 R1722000 thru 1723454 FP1720001 thru FP1720003 P17257120 thru P17257188	MC0523557-1 See Notes [3],[4],[5]	MCS1588-1 MC0523619-1 (access cover gasket)	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R10 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	FQT-KT-2 [9]
175, 175A,B,C	55001 thru 17557119	MC0523557-1	MCS1588-1 MC0523619-1 (access cover gasket)	MCS35010R10 Replaces Cessna P/Ns S350, AN960D10L and AN52010R10 when used to secure the fuel quantity transmitter. Quantity of 5 required per transmitter	FQT-KT-2 [9]
180A,B,C,D,E,F,G,H,J,K[1]	32662 thru 18053000	MC0726110-1 [5]	MCS1588-1 [8] MCS1588-2 [8]	MS35207-264 [7]	FQT-KT-3 [9]
182A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q[1] A182J,K,L,M,N F182P,Q[1]	33843 thru 18266590 A1820001 thru A1820148 F1820001 thru F18200094	MC0726110-1 [5]	MCS1588-1 [8] MCS1588-2 [8]	MS35207-264 [7]	FQT-KT-3 [9]
185,185A,B,C,D,E, A185E,F[1]	1850001 thru 18503683	MC0726110-1 [5]	MCS1588-1 [8] MCS1588-2 [8]	MS35207-264 [7]	FQT-KT-3 [9]
188A, A188, A188A A188B T188C	1880445 thru 18803856 18802349T thru 18803968T T18803297T thru T18803968T	MCC668002-0201 [6]	MCS1588-1 [8] MCS1588-2 [8]	MS35207-264 [7]	FQT-KT-4 [9]
210-5 (205), 210-5A (205A)	2050001 thru 2050577	MC0726110-1 [5]	MCS1588-2 Qty 2	MS35207-264 [7]	FQT-KT-5 [9]
206,U206,U206A,B,C,D,E,F,G[1] TU206A,B,C,D,E,F,G[1] P206,P206A,B,C,D,E,F,G[1] TP206A,B,C,D,E	2060001 thru U20604649	MC0726110-1 [5]	MCS1588-1 [8] MCS1588-2 [8]	MS35207-264 [7]	FQT-KT-3 [9]
207,207A[1], T207,T207A[1]	20700001 thru 20700482	MC0726110-1 [5]	MCS1588-1	MS35207-264 [7]	FQT-KT-6 [9]
210, 210A,B,C,D,E,F, T210F	21057001 thru 21058818	MC0726110-1 [5]	MCS1588-1 [8] MCS1588-2 [8]	MS35207-264 [7]	FQT-KT-3 [9]

[1] Partial model eligibility
[2] This transmitter does not fit aircraft equipped with extended range fuel tanks.
[3] Do not use this transmitter with gauge cluster P/N C669562-108 (Rochester® manufacture). This gage cluster could have been factory installed on aircraft built in 1978 or newer beginning with S/N 17269310.
[4] Do not use this transmitter in aircraft with extended range fuel tanks with gage cluster P/N C669562-0109 (Rochester® manufacture). This gage cluster could have been factory installed on aircraft built in 1979 or newer beginning with S/N 17271035.
[5] Includes aircraft with extended range fuel tanks.
[6] 188 model series with wing fuel tanks only.
[7] A seal is not used in this application. P/N MS35207-264 supercedes P/N AN52010R10. P/N MS35207-264 is an industry standard hardware component.
[8] Where both MCS1588-1 (thick gasket) and MCS1588-2 (thin gasket) are required, install MCS1588-1 between the transmitter and rib and install MCS1588-2 between the fuel cell and rib.
[9] Each kit contains one transmitter, one or two gaskets and five screws or screw/seal assemblies as applicable. The fuel transmitter access cover gasket P/N MC0523619-1 is included when purchasing kit P/N FQT-KT-1 and FQT-KT-2.

Piper Aircraft Eligibility for Transmitters, Gaskets and Screw-Seal Assemblies

Aircraft Model	Eligible Serial Numbers	Fuel Quantity Transmitter	Fuel Quantity Transmitter Gasket	Screw/Seal Assemblies	Fuel Quantity Transmitter Kit
PA-28-140	28-20551 thru 28-26956, 28-7125001 thru 28-7125651 28-7225001 thru 28-7225612, 28-7325001 thru 28-7325684 28-7425001 thru 28-7425454, 28-7525001 thru 28-7525350 28-7625001 thru 28-7625234, 28-7725001 thru 28-7725290	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-150, -160	28-1761 thru 28-4377	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-151	28-7415001 thru 28-7415703, 28-7515001 thru 28-7515449 28-7615002 thru 28-7615435, 28-7715001 thru 28-7715314	MC68101-02	MC461-931	MC1802	FQTP-KT-2
PA-28-161	28-7716002 thru 28-7716323, 28-7816001 thru 28-7816680 28-7916001 thru 28-7916598, 28-8016001 thru 28-8016373 28-8116001 thru 28-8116268, 28-8216007, 28-8216014, 28-8216017, 28-8216019, 28-8216021	MC68101-02	MC461-931	MC1802	FQTP-KT-2
PA-28-180	28-1761 thru 28-5869, 28-7105001 thru 28-7105244 28-7205001 thru 28-7205328, 28-7305001 thru 28-7305611 28-7405001 thru 28-7405290, 28-7505001 thru 28-7505261	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-181	28-7690001 thru 28-7690467, 28-7790001 thru 28-7790607 28-7890001 thru 28-7890551, 28-7990001 thru 28-7990589 28-8090001 thru 28-8090372, 28-8190001 thru 28-8190279 28-8290017, 28-8290018, 28-8290028, 28-8290033, 28-8290034, 28-8290036	MC68101-02	MC461-931	MC1802	FQTP-KT-2
PA-28R-180	28R-30005 thru 28R-30481, 28R-30483 thru 28R-31279 28R-7130001 thru 28R-7130019	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28R-200	28R-30482, 28R-35001 thru 28R-35830 28R-7135001 thru 28R-7135238, 28R-7235001 thru 28R-7235330 28R-7335001 thru 28R-7335455, 28R-7435001 thru 28R-7435331 28R-7535001 thru 28R-7535393, 28R-7635001 thru 28R-7635545	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-28-235	28-10003 thru 28-11393, 28-7110001 thru 28-7110042 28-7210001 thru 28-7210033, 28-7310001 thru 28-7310187 28-7410001 thru 28-7410120, 28-7510001 thru 28-7510145 28-7610001 thru 28-7610206, 28-7710001 thru 28-7710089	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-32-260	32-1 thru 32-1320 32-7100001 thru 32-7100038, 32-7200001 thru 32-7200055 32-7300001 thru 32-7300076, 32-7400001 thru 32-7400061 32-7500001 thru 32-7500053, 32-7600001 thru 32-7600033 32-7700001 thru 32-7700023, 32-7800001 thru 32-7800008	MC68101-02	MC462-021	MC1802	FQTP-KT-1
PA-32-300	32-40000 thru 32-41018, 32-7140001 thru 32-7140086, 32-7240001 thru 32-7240147 32-7340001 thru 32-7340201, 32-7440001 thru 32-7440182 32-7540001 thru 32-7540198, 32-7640001 thru 32-7640142 32-7740001 thru 32-7740113, 32-7840001 thru 32-7840222	MC68101-02	MC462-021	MC1802	FQTP-KT-1

[1] Transmitter is not interchangeable with "Rochester type" fuel quantity transmitters. Transmitter is not to be used in aircraft equipped with Rochester manufactured fuel gauges that may have been installed as a Piper service spare part, in accordance with a Piper Service Kit.
[2] Each kit contains (1) Transmitter, (1) Gasket and (5) Screw/Seal Assemblies

Marvel-Schebler Fuel Inlet Screen Gaskets and Cotter Keys

The copper gaskets should be changed when finger screens are inspected at each annual inspection.

- Fits many carbureted aircraft!
- Cad plated for corrosion resistance!
- Save up to 70%!


MC16-A108


MC16-A36


MC16-A48


MC82-1
MC82-11
MC82-14

Engine Model		Marvel-Schebler/Facet Carburetor Models	P/N
Continental Series	**Lycoming Series**		
A-65, A-75, C-85, C-90, O-200, C-125, C-145, O-300	O-235, O-290, O-320	MA-3, MA-3PA, MA-3A, MA-3SPA, MA-4SPA	MC16-A36
GO-300, O-470	O-340, O-360, O-435, O-540	MA-4-5, MA-5AA, MA-4-5AA, MA-5, MA-6, MA-6AA, HA-6	MC16-A48
		MA4-5, MA-4-5AA, MA-5, MA-6AA, HA-6	MC16-A108
		MA-4-5, MA-4-5AA, MA-5, MA-5AA, MA-6AA	MC82-1
A-65, A-75, C-85, C-90, O-200, C-125, C-145, O-300, GO-300, O-470	O-235, O-290, O-320, O-340, O-360, O-435, O-540	MA-3, MA-3A, MA-3PA, MA-3SPA, MA-4SPA, MA-4-4, MA-4-5AA, MA-5, MA-5AA, MA-6, MA-6AA	MC82-11
		MA-3A, M A-3PA, MA-3SPA, MA-4SPA, MA-4-5, MA-5, MA-5AA, MA-6, MA-6AA, HA-6	MC82-14

Fuel Caps for Piper Aircraft

Improved materials and better design

- Fuel caps with "CA" prefix have fuel resistant elastomer to resist swelling, and a stronger lever that resists bending.
- P/N 3267 is a vented cap with a vertical fin on top for easy removal and made of stainless steel to prevent corrosion.


P/N 3267


P/N CA16097N


P/N CA17672N


P/N CA27221N

P/N	Cap	Replaces OEM P/N	Eligible Models
3267	Vented	10188-00, 454009	PA-11, PA-11S, PA-12, PA-12S, PA-14, PA-18, PA-20, PA-22 Series
CA16097N	Vented	160297-000	PA-23-235 and PA-23-250, s/n 27-1 thru 27-7554168
CA17672N	Vented	454-084, 17672-000	PA-23, PA-23-160
CA27221N	Non-vented	27221-00, 554-180	PA-24-180,-250,-260,-400, PA-30,PA-39

Manufactured by PMA Products, Inc. and F Atlee Dodge

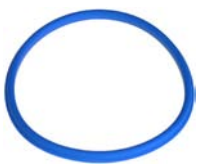
Fuel Valve for PA-28 Series Aircraft

P/N 491-947

Fuel Cap Seals for Piper, Beech, Mooney, and Cessna Citations

Don't pay $750.00 for a fuel cap when you only need to replace the seal!

- P/Ns CA38241 and CA457-98:
  - The only seals that legally replace the main seal on many Beech, Cessna and Mooney fuel caps
  - Made of a fluorosilicone material with unlimited shelf life
  - CA38241: Molded seal with a lip - designed for "lightning proof" fuel caps
  - CA457-98: Round O-ring seal
- P/N CA66815-000A: Round O-ring seal made of Viton to eliminate any swelling issues experienced when using AutoGas.


P/N CA38241


P/N CA66815-000A

Part Number	Replaces OEM P/N	Eligible Models
CA38241	Beech P/N 38241, 38283 used with P/N 38339, 100-381005-1 or 100-381005-5 fuel caps only	99, 99A, A99A, B99, C99, 100, A100, B100, 200, 200T, 200C, 200CT, B200, B200T, B200C, B200CT, B300, B300C, 1900, 1900C, 1900D
	Cessna	525 s/n 0549 and On, 650 s/n 0001 thru 0101 incorporating SB650-28-23, and 0102 and On, 680,750
	Mooney seals used with P/N 457-370 fuel caps only	M20C,D,E,F,G,J (with O&N Aircraft Mod. fuel bladders per STC SA2277CE and SA2350CE)
CA457-98	Beech P/N 457-98, 457-98-1	E90, F90, 99, 99A, A99A, B99, C99, 100, A100, B100, 200, 200T, 200C, 200CT, B200, B200T, B200C, B200CT
CA66815-000A	Piper P/N 66815-000, 462-056 used with fuel cap assemblies P/N 66817-00, 39824-02, 38599-02 or 66817-02 only	PA-28-140, PA-28-150, -160, -180 s/n 28-1761 and on, PA-28-151, -161, PA-28-181, PA-28-201T, PA-28-235, PA-28-236, PA-28R-180, PA-28R-200 s/n 28R-30482, 28R-35001 thru 28F-7135238, PA-28-201, PA-28R-201, PA28R-201T, PA-28RT-201, PA32-260, PA-32-300 s/n 32-40000 thru 32-7840222 and 32-7940001 and on, PA-32R-300, PA-32RT-300, PA-32RT-300T, PA-32-301, 301T, PA-32R-301, PA-32R-301T, PA-34-200, PA-34-220T, PA-38-112, PA-44-180, -180T

Manufactured by PMA Products, Inc.

Fuel and Alcohol Pumps for Cessna, Piper, and Beech Aircraft

Save over $400 off OEM List!

- FAA-PMA approved - unconditional one year warranty
- Modern solid state pumps - more dependable and use less current than the old breaker point pumps
- Internal check valve to prevent backflow
- Replacement filter kit P/N CA42370 available for each fuel pump


P/N CA6508092-1A


P/N CA476284E-1

Part Number	Replaces OEM P/N	Eligible Models
CA476284E-1	Beechcraft P/N 476284	55,A55,B55,C55,D55,E55,56TC,A56TC,58,58P,58TC,60,A60,B60,A65,70,B80,E95,C90,E90, F90 s/n LA-2 thru LA-56,100,A100 s/n B-1 thru B-247,200 s/n BB-2 thru BB-665,200T s/n BT-1 thru BT-16, 200C s/n BL-1 thru BL-9,99,99A,A99A,B99,C99,T-34C s/n GL-1 and On,T-44A
CA6508092-1A	Cessna P/N 476411, 6508091-1, and 6508092	310Q,310R,335,340,340A,401B,402B,402C,404,414,414A,421B,421C,425,441,500[1],525,550,560,650
CA35328-800E	Piper P/N 35328-800 and 481-666 (STC)	PA23, PA-23-150,-160,-235,-250,-250 (6 place), s/n 27-1 thru 27-2504 (14v), PA24, PA-24-180,-250,-260, s/n 24-3642,24-4000 thru -4782, and 24-4781 thru -4803,PA-28-140,-150,-160,-180,PA-28-151, -161 (14v),-181 s/n 28-7690001 thru -7990626 and -8090001 and On (14v),PA-38-112
CA62220-004	Piper P/N 62220-004	PA-28-161 S/N 2816110 thru 2816119 and 2842001 and up. PA-28-181 S/N 2890206 thru 2890231, 2843001 thru 2843820, 2843822 thru 2843851 and 2843853 and up with Lycoming O-360-A4M engine.
CA65628-800E	Piper P/N 65628-800 (STC)	PA-28-235,-236,PA-32-260,PA-44-180 with STC SA02579AT installed

[1] Approved for all S/Ns including S/N 500-0001 thru 500-0040 incorporating SB30-1, and S/N 500-0001 thru 500-0213 incorporating SB21-9.
Manufactured by PMA Products, Inc.

FAA-PMA Approved

Fuel Cap for Cessna Aircraft

Replace worn out caps!
P/N C156003-0101

- Fits most Cessna aircraft
- Vented
- Manufactured by Cessna

Fuel Cap Gaskets for Cessna Aircraft

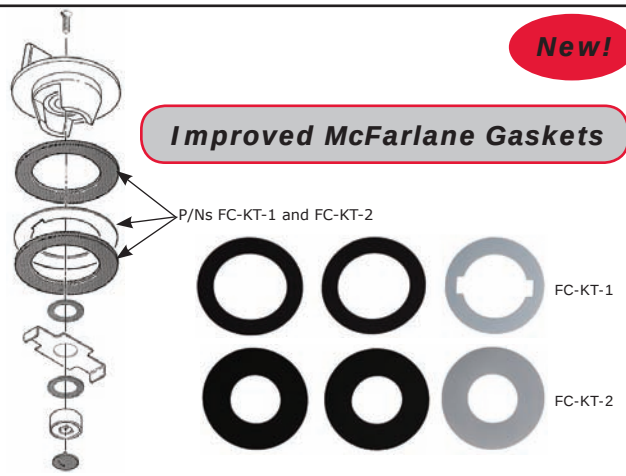
No more leaking or hard to open fuel caps!
P/N FC-KT-1 (for cap P/N C156003-0101)
P/N FC-KT-2

Our unique double gasket slip ring arrangement combined with our approved instructions for adjusting the tightness of the cap allows leak free fuel caps that don't require super-human strength to open.

- Kit contains required gasket and slip ring as required
- Replaces seals in OEM fuel cap P/Ns 0426015-1, C156003-0101 and C156004-0101
- Fuel proof Viton® and Teflon® for long life

New!

Improved McFarlane Gaskets



Aircraft	Serial Number	Kit P/N FC-KT-1 [2]	Kit P/N FC-KT-2
140A	All	•	
150, 150A,B,C,D,E,F,G,H,J,K	All	•	
150L[1]	15072004 thru 15072628	•	
150L[1],M	15072629 thru 15079405	•	•
A150K	All	•	
A150L[1]	A1500227 thru A1500276	•	
A150L[1],M	A1500277 thru A1500734	•	•
F150F,G,H,J,K,L[1]	F150-0001 thru F1500738	•	
F150L[1],M	F15000739 thru F15001428	•	•
FA150K,L[1]	FA1500001 thru FA1500166	•	
FA150L[1],M	FA1500167 thru FA1500336	•	•
FRA150L,M	FRA1500121 thru FRA1500166	•	
	FRA1500167 thru FRA1500336	•	•
152	15279406 thru 15279629	•	•
	15279630 thru 15286033	•	
A152	A1520735 thru A1520741	•	•
	A1520742 thru A1521049	•	
F152	F15201429 thru F15201528	•	•
	F15201529 thru F15201980	•	
FA152	FA1520337 thru FA1520347	•	•
	FA1520348 thru FA1520425	•	
170, 170A,B	18729 thru 27169	•	
172, 172A,B,C,D,E,F,G,H,I,K,L[1]	28000 thru 17259823	•	
172L[1],M, N[1]	17259824 thru 17269468	•	•
172N[1],P,Q,R,S, 172RG	17269469 thru 172S99999	•	
F172D,E,F,G,H,J,K	F172-0001 thru F17200804	•	
F172L,M,N[1]	F17200805 thr F17201749	•	•
F172N[1],P	F17201750 thru F17202254	•	
FR172E,F,G,H[1]	FR17200001 thru FR17200300	•	
FR172 H[1],J,K[1]	FR17200301 thru FR17200630	•	•
FR172K[1]	FR17200631 thru FR17200675	•	
R172K	R1722000 thru R1722751	•	•
	R1722752 thru R1723454	•	
FP172, P172D	All	•	
175, 175A,B,C	All	•	
177, 177A,B	All	•	
177RG, F177RG	All	•	
180, 180A,B,C,D,E,F,G,H,J,K	All	•	

Aircraft	Serial Number	Kit P/N FC-KT-1 [2]	Kit P/N FC-KT-2
182, 182A,B,C,D,E,F,G,H,J,K,L,M, N,P,Q,R	33000 thru 18268434	•	
182R,S,T, T182T	18268435 and On	•	
F182P,Q	All	•	
FR182	All	•	
R182	R18202000 thru R18202041	•	
	R18200001 thru R18201999	•	
T182	18268435 thru 18268541	•	
	18267716 thru 18268434	•	
TR182[1]	R18200584 thru R18501999	•	
	R18202000 and On	•	
185, 185A,B,C,D,E, A185E,F[1]	185-0001 thru 18504424	•	
A185F[1]	18504425 thru 18504448	•	
188[1], 188A,B, A188A, A188B[1]	188-0446 thru 18803296	•	
A188B[1]	18803297 and On	•	
	18800967T thru 18803296T	•	
	18803297T thru 18803973T	•	
T188C	T18803325T thru T18803974T	•	
210-5 (205), 210-5A, (205A)	All	•	
206	All	•	
206H, T206H	All	•	
P206, P206A,B,C,D,E	All	•	
TP206A,B,C,D,E	All	•	
U206, U206A,B,C,D,E,F,G[1] TU206A,B,C,D,E,F,G[1]	U206-0276 thru U20606846	•	
U206G[1], TU206G[1]	U20606847 and On	•	
207, 207A, T207, T207A	All	•	
210, 210A,B,C,D,E,F,G,H,J,K[1],	57001 thru 21059361	•	
T210F,G,H,J	All	•	
210N[1],R, T210N[1],R	21064136 thru 21065009	•	
336, 337, 337A,B,C,D,E,F,G,H	All	•	
F337E,F,G,H, FT337GP, FT337HP, M337B, P337H T337G,H	All	•	

[1] Partial model eligibility
[2] P/N FC-KT-1 is only eligible for the indicated aircraft when they are equipped with the C156003-0101 vented fuel cap per Cessna mandatory service bulletin SEB92-27 and ME84-31. McFarlane recommends replacing any non-vented caps with C156003-0101.

Fuel Selector Valve Cam and Bearing for Cessna Aircraft

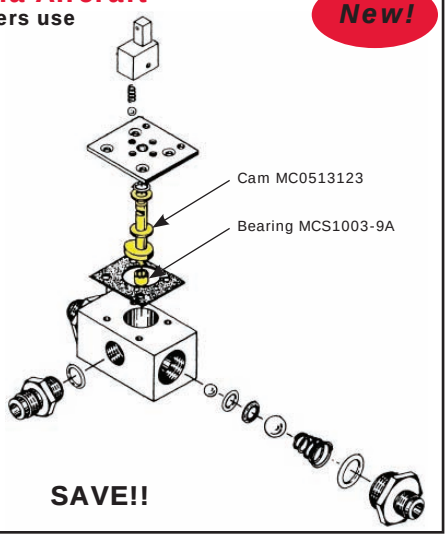
Improved corrosion protection inside the valve when customers use McFarlane's new aluminum bearing with the cam.

P/N MC0513123 Cam

P/N MCS1003-9A Bearing

- Anodized aluminum cam
- Aluminum bearing eliminates galvanic corrosion!
- Save $$!

New!



Aircraft	Cam MC0513123	Bearing MCS1003-9A
170B	•	
172, 172A,B,C.D,E,F,G,H,I,K,L	•	•
172M	•	•
F172D,E,F,G,H,K,L	•	•
F172M	•	•
FP172, P172D	•	•
R172E,F,G,H	•	•
R172K	•	•
FR172E,F,G,H	•	•
FR172J,K	•	•
175, 175A,B,C	•	•
177, 177A,B	•	•
180F,G,H,J		•

Fuel Bowl Gaskets for Cessna 300 and 400 Series Aircraft

P/N CAB3-11-1

Replaces OEM P/N CAB3-11-1

Eligible Models

300 series (except 303),400 series (except 402C,406,425,441)

Manufactured by PMA Products, Inc.

Cessna Fuel Filler Neck and Fuel Tank Adapter Gaskets

Replace dry, brittle gaskets to prevent water contamination in fuel.

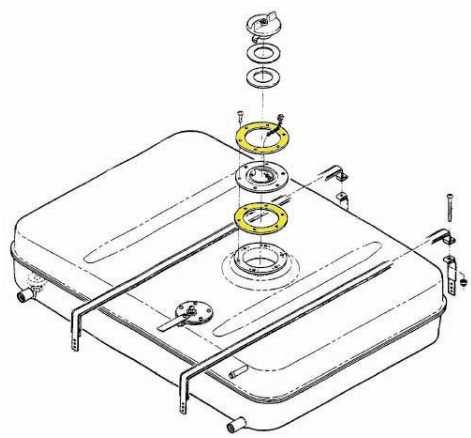
Gaskets required to seal between the wing skin, fuel filler neck, fuel tank adapter and fuel tank.

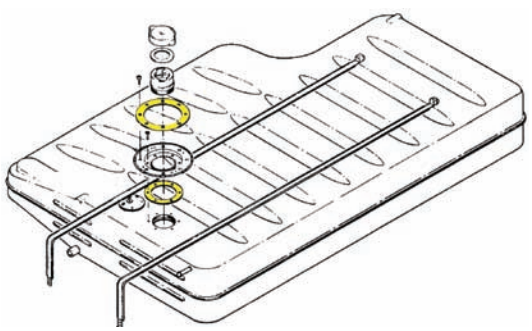
- Realistically priced!
- Cork/rubber composite gaskets meet strict MIL-SPEC requirements for fuel resistance.
- Never reuse these gaskets

Aircraft	Serial Number	Qty per Aircraft	Part Number
140A	All	2	MC0523531
		2	MC0523532
150, 150A,B,C,D,E,F,G,H,J[1]	17001 thru 15069454	2	MC0523531
		4	MC0523532
150J[1]	15069455 thru 15071128	2	MC0523531
		4 [2]	MC0523532
150K,L[1]	15071129 thru 15072628	2	MC0523531
		4 [2]	MC0523532
150L[1],M	15072629 thru 15079405	2	MC0426013-1
		2	MC0426013-2
A150K,L[1]	A1500001 thru A1500276	2	MC0523531
		4 [2]	MC0523532
A150L[1],M	A1500277 thru A1500734	2	MC0426013-1
		2	MC0426013-2
F150F,G,H,J	All	2	MC0523531
		4	MC0523532
F150K,L[1]	F15000530 thru F15000738	2	MC0523531
		4 [2]	MC0523532
F150L[1],M	F15000739 thru F15001428	2	MC0426013-1
		2	MC0426013-2
FA150K,L[1]	FA1500001 thru FA1500166	2	MC0523531
		4 [2]	MC0523532
FA150L[1],M	FA1500167 thru FA1500336	2	MC0426013-1
		2	MC0426013-2
152, A152, F152, FA152	All	2	MC0426013-1
		2	MC0426013-2
170A	All	A/R	MC0523531
		4	MC0523532
170B	All	2	MC0523531
		4	MC0523532
172, 172A,B,C,D,E,F,G,H,I	All	2	MC0523531
		4	MC0523532
172K,L[1]	17257162 thru 17259823	2	MC0523531
		4	MC0523532
172L[1]	17259824 thru 17259903	2	MC0523531
		4	MC0523532
172L[1],M[1]	17259904 thru 17263458	2	MC0426013-1
172M[1],N,P,Q	17263459 thru 17276654	2	MC0426013-1
		2	MC0426013-2
F172D,E,F,G,H[1]	F172-0001 thru F172-0559	2	MC0523531
		4	MC0523532
F172H[1],K	F172-0560 thru F17200804	2	MC0523531
		4	MC0523532
F172L,M[1]	F17200805 thru F17201234	2	MC0426013-1
F172M[1],N,P	F17201235 thru F17202254	2	MC0426013-1
		2	MC0426013-2
FP172, P172D	All	2	MC0523531
		4	MC0523532
FR172E,F,G,H[1]	FR17200001 thru FR17200300	2	MC0523531
		4	MC0523532
FR172H[1],J,K	FR17200301 thru FR17200675	2	MC0426013-1
R172E,F,G,H[1]	R172-0302 thru R1720494	2	MC0523531
		4	MC0523532
R172H[1]	R1720495 thru R1720620	2	MC0426013-2
R172K	R1722000 thru R1723454	2	MC0426013-1
175, 175A,B,C	All	2	MC0523531
		4	MC0523532

[1] Partial model eligibility
[2] Requires 8 each per aircraft for aircraft with long range tanks

Improved Upper Gasket
P/N MC0523531
Thicker, softer material for a better seal around the tinnerman clips.

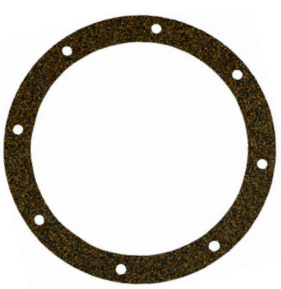




P/N MC0426013-1
Thickness 0.062"

P/N MC0426013-2
Thickness 0.031"

P/N MC0523532
Thickness 0.062"



P/N MC0523531
Thickness 0.094"

Fuel Selector and Fuel Shut-Off Valves For Cessna Aircraft

***New* or Repaired Valves**

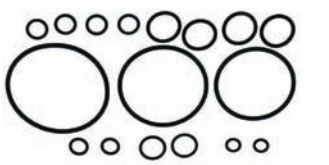
Buy one of our new FAA-PMA approved valves, purchase a repaired one in stock or we can repair your valve and return yours for core credit. Many valves are in stock and ready to ship!

- Repaired by experienced A&P technicians.
- Cleaned, inspected and assembled with all fluorocarbon O-rings, seals, gaskets, hardware and parts as required.
- Pressure tested for leaks and evaluated for proper fuel flow.
- "Return to Service" tag provided.

Repair kits - P/Ns FSO-KT-1 thru FSO-KT-24

Contains all required hardware to reseal and perform a repair (seals, springs, O-rings, roll pins, washers, screws, balls and plug). FSO-KT-1 for 0716613 series valves includes the parts contained in Cessna P/N 0716613-200 and -201 seal kits plus additional hardware required for a basic repair. All parts are FAA approved or certified industry standard hardware.

Many Cessna Fuel valves (including the 0716613 series) require special tools and processes for reassembly. For convenience an experienced A&P technician at McFarlane can repair your valve.



Seal Kits - P/Ns FSS-KT-1 thru FSS-KT-20

Only McFarlane has FAA approval to replace the old, less fuel resistant O-rings with the latest fuel-proof fluorocarbon O-rings!

Fuel Selector Valve and Shut Off Valve Seal kits are conveniently packaged to include all of the necessary O-rings and/or gaskets applicable to specific single engine Cessna aircraft models. McFarlane replaces the old Buna N or Nitrile (MS Series) O-rings and early synthetic rubber (NAS Series) O-rings with fluorocarbon elastomer, which has improved fuel and heat resistance. Cork/Rubber gaskets meet tough government standards for fuel resistance.

Replacement Parts

McFarlane has a complete line of replacement parts for Cessna fuel valves including detent plates, springs, plastic seals, cams and much more in stock and ready to ship.

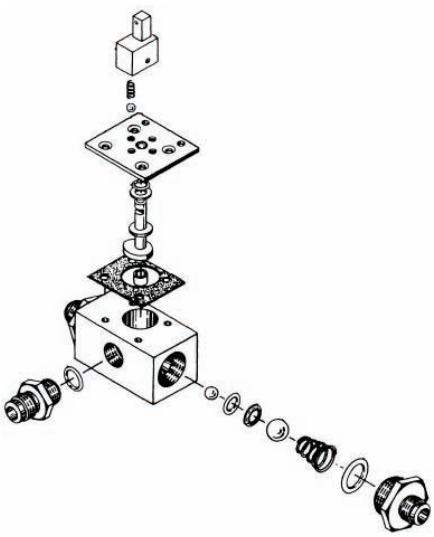
Gaskets and O-rings

Gaskets can be purchased individually or as convenient kits.
O-rings can be purchased in quantities of 10 each or as convenient kits!

Brand New McFarlane 170, 172, 175, 177 FAA-PMA Fuel Valve!

New!

The original Cessna fuel valve that started in model 170 was a simple but ingenious cam ball design that has proven very reliable over the years. McFarlane has repaired a lot of these original Cessna valves and know them well. We are now rejecting a big percentage of the valve cores sent to us. A lot of them have corrosion damage in the main body that is too severe to fix or the O-ring retention area is damaged and too rough to seal. Many of the fittings are corroded through. The cam bearing is brass and easily corrodes the aluminum alloy cam. McFarlane now has a totally new valve that was designed just like the original valve but with improvements where needed.



McFarlane's new valves are totally anodized where the original valves were Alodine® conversion coated. This change drastically improves the surface durability, wear resistance, and corrosion resistance of all the components. They will stay pretty too! Corrosion protection is important since the valves are at the lowest point in the fuel system without any upstream water separation or contaminate screening. Modern machining processes lets us precision machine the O-ring capture cavity. The original valve O-rings were retained by staking (stamp forming) the housing. This process was inconsistent at best and distressed and weakened the surrounding aluminum structure. We have eliminated the brass bushing that corrodes the cam. Yesterday's manual machining process of the original valves were often inconsistent enough to let one port flow more fuel than needed while the other port might flow a very marginal amount of fuel. The new McFarlane valve is computer machined for a perfect balance of fuel flow.

Now for more good news!! All of the improved parts that go into our new valve are interchangeable with the original Cessna valve. This means that if your valve is good with the exception of a few parts, we can fix it at a reasonable price! In many cases our new FAA-PMA parts will cost less than the cost of repairing the old.

You can rest assured that if it's a new McFarlane valve or a valve repaired by McFarlane, it will be pressure, functional, and flow tested to perform to the highest standards.

Coming Soon! McFarlane Fuel Valves Pending FAA-PMA Approval!

MC0513120-1
MC0513120-2
MC0513120-3
MC0513120-5AP
MC0513121
MC0513122
MC0513124-2
MC0513124-2AP
MC0513124-3
MC0513126
MC0513126-1
MC0516011-2
MC1716014-1

New FAA-PMA approved fuel selector valves for most 172-177 aircraft!

New McFarlane Fuel Valves pending FAA approval!
Look for announcements of new approvals at www.mcfarlaneaviation.com or in our monthly email newsletter announcement of new products!

New! McFarlane FAA-PMA approved fuel valve!

Eligibility for New, Repaired Fuel Selector and Fuel Shut Off Valves and Kits for Cessna Aircraft

		Fuel Selector Valve			Fuel Shut-Off Valve		
Model	**Serial Number**	**McFarlane P/N [5]**	**Seal Kit**	**Repair Kit**	**McFarlane P/N [5]**	**Seal Kit**	**Repair Kit**
120,140	8001 thru 15075	0411716S, 08HD1/4X1/4X1S					
140A	15200 thru 15724	0413020-3S					
150[1]	17001 thru 17769				0411803-2S, 9851078-2S [3]		
150[1], 150A,B,C,D,E,F,G	17770 thru 15067198				0411803-5S 0411803-6S		
150H,J,K,L[1]	15067199 thru 15073658				0411803-6S		
150L[1],M[1]	15073659 thru 15078505				0411803-8S		
150M[1]	15078506 thru 15079405				9851070-2S	FSS-KT-1	FSO-KT-2
A150K,L[1]	A1500001 thru A1500342				0411803-6S		
A150L[1]	A1500343 thru A1500523				0411803-8S		
A150L[1]	A1501001 thru A1501018				0411803-6S		
A150L[1],M[1]	A1501019 thru A1500684				0411803-8S		
A150M[1]	A1500685 thru A1500734				9851070-2S	FSS-KT-1	FSO-KT-2
A-A150L[1]	A-A1500001 thru A-A1500006				0411803-6S		
A-A150L[1]	A-A1500007 thru A-A1500009				0411803-8S		
F150F,G,H,J,K,L[1]	F150-0001 thru F15000863				0411803-6S		
F150L[1],M[1]	F15000864 thru F15001338				0411803-8S		
F150M[1]	F15001339 thru F15001428				9851070-2S	FSS-KT-1	FSO-KT-2
FA150K,L[1]	FA1500001 thru FA1500166				0411803-6S		
FA150L[1],M[1]	FA1500167 thru FA1500311				0411803-8S		
FA150M[1]	FA1500312 thru FA1500336				9851070-2S	FSS-KT-1	FSO-KT-2
FRA150L[1]	FRA1500121 thru FRA1500166				0411803-6S		
FRA150L[1],M[1]	FRA1500167 thru FRA1500311				0411803-8S		
FRA150M[1]	FRA1500312 thru FRA1500336				9851070-2S	FSS-KT-1	FSO-KT-2
152/A152/F152/FA152	All				9851070-2S	FSS-KT-1	FSO-KT-2
170[1]	18003 thru 18573	0511122S [3]					
170[1]	18574 thru 18729	0511160S					
170A,B[1]	18730 thru 20285	0413020-3S					
170B[1]	20286 thru 27169	MC0513120-5 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
172, 172A,B,C	28000 thru 17249544	MC0513120-5 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
172D,E	17249545 thru 17251822	MC0513120-6 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
172F,G,H,I,K,L,M[1]	17251823 thru 17263458	MC0513120-8 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
172M[1]	17263459 thru 17267584	MC0513120-200 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
172N,P[1]	17267585 thru 17275034	9851067-4S	FSS-KT-5	FSO-KT-13			
172P[1], Q	17275035 thru 17276259	9851096-2S, 9851096-5S	FSS-KT-4 [2]	FSO-KT-7 [2]			
172P[1]	17276260 thru 17276654	9851096-5S	FSS-KT-4 [2]	FSO-KT-7 [2]			
172R,S	17280001 & On, 172S8001 & On	9851096-5S	FSS-KT-4	FSO-KT-7	S1903-2		
172RG[1]	172RG0001 thru 172RG0890	9851067-7S	FSS-KT-4	FSO-KT-15			
172RG[1]	172RG0891 thru 172RG1177	9851096-2S, 9851096-5S	FSS-KT-4	FSO-KT-7			
172RG[1]	172RG1178 thru 172RG1191	9851096-5S	FSS-KT-4	FSO-KT-7			
F172D,E	F172-0001 thru F172-0085	MC0513120-6 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
F172F,G,H,K,L,M[1]	F172-0086 thru F17201234	MC0513120-8 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
F172M[1]	F17201235 thru F17201514	MC0513120-200 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
F172N,P[1]	F17201515 thru F17202134	9851067-4S	FSS-KT-5	FSO-KT-13			
F172P[1]	F17202135 thru F17202254	9851096-2S, 9851096-5S	FSS-KT-4 [2]	FSO-KT-7 [2]			
FR172E,F,G,H,J[1]	FR17200001 thru FR17200390	MC0513120-8 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17	0716111-1SF	FSS-KT-16	FSO-KT-3
FR172J[1]	FR17200391 thru FR17200530	MC0513120-8 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17	0716111-2S [3]		
FR172J[1]	FR17200531 thru FR17200590	MC0513120-200 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
R172K, FR172K	All	MC0513120-200 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17	0716109-1S	FSS-KT-17	FSO-KT-5
P172/FP172	All	MC0513120-6 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
175, 175A,B	All	MC0513120-5 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
175C	17557003 thru 17557119	MC0513120-6 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17			
177,177A,B	All	MC0513120-9 *New FAA-PMA!*	FSS-KT-2	FSO-KT-17	S1903-1S	FSS-KT-16	FSO-KT-4
177RG[1]	177RG0001 thru 177RG0282				0716111-4S, S1903-2S	FSS-KT-16	FSO-KT-4
177RG[1]	177RG0283 thru 177RG0314	0716613-4S	FSS-KT-18	FSO-KT-1			
177RG[1]	177RG0315 thru 177RG1051	0716613-5S	FSS-KT-18	FSO-KT-1			
177RG[1]	177RG1052 thru 177RG1366	9851067-6S	FSS-KT-5	FSO-KT-13			
F177RG[1]	F177RG0001 thru F177RG0062				0716111-4S, S1903-2S	FSS-KT-16	FSO-KT-4
F177RG[1]	F177RG0063 thru F177RG0077	0716613-4S	FSS-KT-18	FSO-KT-1			
F177RG[1]	F177RG0078 thru F177RG0160	0716613-5S	FSS-KT-18	FSO-KT-1			
F177RG[1]	F177RG0078 thru F177RG0160	0716613-5S	FSS-KT-18	FSO-KT-1			

Eligibility continued on next page

[1] Partial model eligibility
[2] Use FSS-KT-3 and FSO-KT-8 if equipped with air conditioner
[3] Part number listed for reference only
[4] The detent housing type must be verified by McFarlane's technician before purchasing an exchange unit from our stock. Please call 888-624-3153.
[5] The "S", "SF" or "SP" suffix indicates a McFarlane repaired valve. The applicable Cessna part number is the McFarlane part number without the suffix. Reference the Cessna part number for all maintenance procedures.

Eligibility for Repaired Fuel Selector and Fuel Shut Off Valves and Kits for Cessna Aircraft

		Fuel Selector Valve			Fuel Shut-Off Valve		
Model	**Serial Number**	**McFarlane P/N [4]**	**Seal Kit**	**Repair Kit**	**McFarlane P/N [4]**	**Seal Kit**	**Repair Kit**
F177RG[1]	F177RG0161 thru F177RG0177	9851067-6S	FSS-KT-5	FSO-KT-13			
180,180A,B,C,D,E,F,G,H,J	30000 thru 18052770	0311070-1S	FSS-KT-6	FSO-KT-16			
180K	18052771 thru 18053203	9851067-5S	FSS-KT-5	FSO-KT-13			
182,182A,B,C,D	33000 thru 18253598	0311070-1S	FSS-KT-6	FSO-KT-16			
182E,F,G,H,J,K,L,M,N,P	18253599 thru 18265175	0716613-1S	FSS-KT-18	FSO-KT-1			
182Q,R[1]	18265176 thru 18268055	9851067-5S	FSS-KT-5	FSO-KT-13			
182R[1]	18268056 thru 18268434	9851096-1S	FSS-KT-5	FSO-KT-6			
182R[1], 182S	18268435 and On	9851096-3S	FSS-KT-7	FSO-KT-9			
182T	18280945 thru 18299999	9851116-1S, 9851116-2S	FSS-KT-8	FSO-KT-23			
A182J,K,L,N[1]	A182-0001 thru A182-0148	0716613-1S	FSS-KT-18	FSO-KT-1			
F182P	F18200001 thru F18200025	0716613-1S	FSS-KT-18	FSO-KT-1			
F182Q	F18200026 thru F18200169	9851067-5S	FSS-KT-5	FSO-KT-13			
FR182	FR18200001 thru FR18200070	9851067-4S	FSS-KT-5	FSO-KT-13			
R182[1],TR182[1]	R18200001 thru R18201798	9851067-4S	FSS-KT-5	FSO-KT-13			
	R18201799 thru R18201999	9851096-2S	FSS-KT-4	FSO-KT-7			
	R18201799 thru R18202041	9851096-5S	FSS-KT-4	FSO-KT-7			
T182[1]	18267716 thru 18268055	9851067-4S	FSS-KT-5	FSO-KT-13			
	18268056 thru 18268541	9851096-2S, 9851096-5S	FSS-KT-4	FSO-KT-7			
T182T	T18208001 thru T18299999	9851116-1S, 9851116-2S	FSS-KT-8	FSO-KT-23			
185, 185A[1]	185-0001 thru 185-0413				0716109-1S	FSS-KT-17	FSO-KT-25
185A[1]	185-0414 thru 185-0512	Fuel Valve Control P/N MCS1241-1			0716111-1S [2]	FSS-KT-16	FSO-KT-3
185B	185-0513 thru 185-0653	0716613-3S	FSS-KT-18	FSO-KT-1	0716111-1S [2]	FSS-KT-16	FSO-KT-3
		Fuel Valve Control P/N MCS1241-1					
185C	All	0716613-3S	FSS-KT-18	FSO-KT-1	0716111-1S [2]	FSS-KT-16	FSO-KT-3
185D,E, A185E[1]	185-0777 thru 185-1300	0716613-3S	FSS-KT-18	FSO-KT-1	0716111-1S [2]	FSS-KT-16	FSO-KT-3
					Fuel Shut Off Control P/N MCS1241-1		
A185E[1]	18501301 thru 18501599	0716613-4S	FSS-KT-18	FSO-KT-1	0716111-1S [2]	FSS-KT-16	FSO-KT-3
					Fuel Shut Off Control P/N MCS1241-27		
	18501600 thru 18501679	0716613-4S	FSS-KT-18	FSO-KT-1	0716111-1S [2]	FSS-KT-16	FSO-KT-3
					Fuel Shut Off Control P/N MCS1241-34		
A185E[1], A185F[1]	18501680 thru 18502310	0716613-4S	FSS-KT-18	FSO-KT-1	0716111-1S [2]	FSS-KT-16	FSO-KT-3
A185F[1]	18502311 thru 18503153	0716613-4S	FSS-KT-18	FSO-KT-1	0716111-1SP	FSS-KT-16	FSO-KT-3
	18503154 thru 18504328	9851067-5S	FSS-KT-5	FSO-KT-13	9851070-2S	FSS-KT-1	FSO-KT-2
	18504329 thru 18504424	9851096-1S	FSS-KT-5	FSO-KT-6	9851070-2S	FSS-KT-1	FSO-KT-2
	18504425 thru 18504448	9851096-4S	FSS-KT-5	FSO-KT-6	9851070-2S	FSS-KT-1	FSO-KT-2
188,188A,B,A188,A188A,A188B Without Wing Tanks	188-0001 thru 18802348				1616016-1S [3] 1H14-2S [3]		
A188 With Wing Tanks	188-0446 thru 188-0572				0716111-1S [2]	FSS-KT-16	FSO-KT-3
A188A[1],A188B[1] With Wing Tanks	18800573 thru 18802348				0716111-5S	FSS-KT-16	FSO-KT-3
A188B[1]	18802349 thru 18802745T				0716111-5S	FSS-KT-16	FSO-KT-3
A188B[1],T188C	18802746 thru 18803974T				9851070-2S	FSS-KT-1	FSO-KT-2
190[1],195[1], 195A,B	7004 thru 16083	0311070S					
	16084 thru 16183	0311070-1S	FSS-KT-6	FSO-KT-16			
210-5 (205)[1], 210-5A (205A)[1]	205-0001 thru 205-0550	1216405-1S	FSS-KT-10	FSO-KT-21			
210-5A (205A)[1]	205-0552 thru 205-0555	1216405-1S	FSS-KT-10	FSO-KT-21			
	205-0551, 205-0556 thru 205-0577	HE764S	FSS-KT-9	FSO-KT-24			
206/U206,U206A,B,C,D,E,F[1]	U206-0001 thru U20602199	C291503S	FSS-KT-11	FSO-KT-10			
TU206F[1],G[1], U206F[1],G[1]	U20602200 thru U20605919	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
TU206A,B,C,D,E,F[1]	U206-0487 thru U20602199	C291503S	FSS-KT-11	FSO-KT-10			
TU206G[1], U206G[1]	U20605920 thru U20606439	1216100-2S	FSS-KT-11	FSO-KT-11			
	U20606440 thru U20607020	1216100-1S	FSS-KT-11	FSO-KT-11			
P206,P206A,B,C,D,E	All	C291503S	FSS-KT-11	FSO-KT-10			
TP206A,B,C,D,E	All	C291503S	FSS-KT-11	FSO-KT-10			
206H,T206H	20608001 thru T20699999	9851096-5S	FSS-KT-4	FSO-KT-7			
207,T207,207A[1],T207A[1]	20700001 thru 20700654	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
207A[1],T207A[1]	20700655 thru 20700729	1216100-2S	FSS-KT-11	FSO-KT-11			
	20700730 thru 20700788	1216100-1S	FSS-KT-11	FSO-KT-11			
210,210A	57001 thru 21057840	1216001-1S	FSS-KT-12	FSO-KT-12			
210B,C	21057841 thru 21058220	1216405-1S	FSS-KT-10	FSO-KT-21			
210D,E,F, T210F	All	HE764S	FSS-KT-9	FSO-KT-24			
210G,H,J	All	C291503S	FSS-KT-11	FSO-KT-10			
T210G,H,J	T210-0198 thru T210-0392	C291503S	FSS-KT-11	FSO-KT-10			
210K,L,M,N[1]/T210K,L,M,N[1]	21059200 thru 21064535	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
210N[1],R/T210N[1],R	21064536 thru 21065009	9851110-3S	FSS-KT-15	FSO-KT-22			
P210N[1]	P21000001 thru P21000760	1216100-1S, C291503-0101S	FSS-KT-11	FSO-KT-11			
P210N[1],R	P21000761 thru P21000874	9851110-3S	FSS-KT-15	FSO-KT-22	0716111-4S		
310, 310B,C,D	35000 thru 39299	0855013-1S	FSS-KT-6	FSO-KT-18			
310F,G,H,I,J,J-1,K	310-0001 thru 310K0245	0855013-1S, 0855020-4S (Aux)	FSS-KT-6 FSS-KT-19	FSO-KT-18 FSO-KT-19			
320, 320-1, 320A,B,C	320-0001 thru 320C0073	0855013-1S 0855020-4S (Aux)	FSS-KT-6 FSS-KT-19	FSO-KT-18 FSO-KT-19			
320D	320D0001 thru 320D0130	0855020-5S	FSS-KT-20	FSO-KT-20			

[1] Partial model eligibility
[2] For aircraft with flared threads use P/N 0716111-1SF. For aircraft with pipe threads use P/N 0716111-1SP.
[3] Part number listed for reference only
[4] The "S", "SF" or "SP" suffix indicates a McFarlane repaired valve. The applicable Cessna part number is the McFarlane part number without the suffix. Reference the Cessna part number for all maintenance procedures.

Maintenance Tip:
The fuel selector valve works in unscreened fuel. Contaminated fuel can cause selector valve seal damage. When fueling from possibly contaminated fuel sources McFarlane recommends the use of a fuel filter, such as Mr. Funnel or another filtering device, to reduce trash in the fuel system. See page 242 for additional information on Mr. Funnel fuel filters.