SAF-AIR Aviation Products

Curtis Superior Valve Co. Inc.

• Seal kits available

Fue

Fuel Sytem Fuel and Oil Drain Valves

• Unique O-ring placement prevents leaks by eliminating areas where dirt can gather

Fuel and Oil Quick Drain Valves

- Simple operation spring load close
- FAA-PMA, FAA-TSO or MIL-SPEC approved

A clean, no-mess way to test and drain fuel or oil!









P/N CAV-160

P/N CCB-36450

P/N SA187



P/N CCA-2460





• Unique wedge seal design prevents leakage

Corrosion resistant, stainless steel springs

• O-rings can be replaced instead of buying a new valve

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 192 to determine the correct thread size.

• Special "cure dated" synthetic rubber seals to withstand many liquids and temperatures

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.

		Flush	Use Pin	Open	Hose Adapter		Approval & Conformity		Part Number		Inx	
Thread	Lock	Mount		Action		Material	Notes	Mf	and Notes		рд 193	Alternate P/Ns
	•			Push	1/2"	360 Brass	FAA-TSO	SAI	C500	3		CCA-3400
3/8 NPT	•			Spiral	1/2"	Brass, Unplated	FAA-TSO 9		t CCA-3400		59	C500
1/8 NPT						360 Brass	FAA-TSO	SAI	B187		21	
1/8 NPT				Push	1/4"	360 Brass	FAA-PMA			1	24	BJ1000AH1, CCA-110-H4
1/8 NPT				Push	1/4"	360 Brass	FAA-PMA			1		CAV-110H-4
1/8 NPT				Spiral		Brass, Cad Plate	FAA-TSO 3	Cur	t CCA-36150		61	BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		360 Brass	FAA-PMA	SAI	CAV-110	1	23	BJ1000AS1MY, CCA-1250, CCA-1550, CCA-36150, CCA-7450, CCB-36700
1/8 NPT			•	Push		Brass, Cad Plate		Cur	t CCB-36700		90	BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		Brass, Unplated	FAA-TSO 8	Cur	t CCA-1800	1	44	CAV-110, BJ1000AS1MY
1/8 NPT			•	Push		303 SS	Experimenta	I SAI	110SS		2	
1/8 NPT				Push		303 SS	FAA-TSO	Cur	t CCA-110SS	1		
1/8 NPT			•	Push	1/4"	303 SS	Experimenta	I SAI	110HSS		1	
1/8 NPT		•	•	Push		360 Brass	FAA-TSO	SAI	SA18	14	113	491-806, CCA-2500, F391-18, S2106-3
1/8 NPT		•	•	Push		360 Brass	FAA-TSO	SAI	SA187	14	114	491-806, CCA-250, F391-187, S2106-3
1/8 NPT		•	•	Push		Brass, Unplated	FAA-TSO	Cur	t CCA-2500	7	53	491-806, F391-187B, SA-187 F391-88, S2106-3, SA-18,
1/8 NPT	•			Push		Brass, Unplated	FAA-TSO 3	Cur	t CCA-1550		40	492-100, 492-022, CAV-110 BJ1000AS1MY, BJ1000A-1, 1250
1/8 NPT	•		•	Push			FAA-TSO	-		1	9	BJ1000A-1,CCA-1250, CCA-1550, CCA-7450
1/8 NPT	•			Push	1/4"	360 Brass	FAA-TSO	SAI	1250H	1	10	BJ1000AH1
1/8 NPT	•			Spiral		Alullillulli	Experimenta	Cur	t CCA-1100	12	33	
1/8 NPT	•			Spiral		Anodized/ Aluminum	FAA-TSO	Cur	t CCA-1150		34	
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO 3	Cur	t CCA-4850		70	1250, 492-100, 492-022, BJ1000A-1
1/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO 3	Cur	t CCA-1250		36	1250, 492-100, 492-022, BJ1000A-1, BJ1000AS1MY, CAV-110
1/8 NPT	•			Spiral			FAA-TSO 3	Cur	t CCB-36750	7	91	1250, 492-100, 492-022, BJ1000A-1, BJ1000A-2
1/4 NPT				Push		360 Brass	FAA-PMA			1	26	BJ1000AH2
1/4 NPT				Push	1/4"	360 Brass			t CCA-160-H4			BJ1000AH2, CAV-160H-4
1/4 NPT			•	Push		303 SS	Experimenta	ISAI	160SS		4	
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO 3	Cur	t CCA-7450	6	78	BJ1000AS1MY, CAV-110, CCA-1250
Continued o	n the	next pa	age						NG. Carana and I am			



Fuel and Oil Quick Drain Valves continued from previous page

Continued fi	rom p	revious						_				
			Use				Approval				Fig	
		Florele	Pin	0	Hose		Type and			David Namelani	on	
Thusad	Look	Flush Mount	Type	Open Action	Adapter		Conformity		Mfa	Part Number	pg	Alternate P/Ns
Thread	LOCK	Mount				Material Brass, Cad Plate	Notes			and Notes CCA-9950 7		Alternate P/NS
1/8 NPT	•			Spiral							_	
1/4 NPT			•	Push	1/4"	303 SS	Experiment				3	
1/4 NPT				Push		303 SS	FAA-TSO	- (Curt	CCA-160SS		BJ1000AS1MX, CCA-1300,
1/4 NPT			•	Push		360 Brass	FAA-PMA			CAV-160 1		CCA-1600, CCA-4900
1/4 NPT				Push				_		CCA-1900 1		CAV-160, BJ1000AS1MX
1/4 NPT				Push		304 Stainless	FAA-TSO	_	_	SA-60S	119	
1/4 NPT		•	•	Push			FAA-TSO	_		SA14	_	CCA-2600, F391-14
1/4 NPT		•	•	Push		Brass, Unplated	FAA-TSO	-	Curt	CCA-2600 7	54	F391-14,SA-14
1/4 NPT	•		•	Push		360 Brass	FAA-TSO		SAF	2500 1	11	BJ1000A-2, CCA-1300, CCA-1600, CCA-4900
1/4 NPT	•			Push	1/4"	360 Brass	FAA-TSO			2500H 1	12	BJ1000AH2
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO	4 (Curt	CCA-4800 7	69	
1/4 NPT	•			Push		Brass, Unplated	FAA-TSO	4 (Curt	CCA-1600	41	2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO	4	Curt	CCA-4900	71	2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Unplated				CCA-1300	37	2500, BJ1000A-2
1/4 NPT	•			Spiral						CCA-39000	63	
3/8 NPT	•			Push		Brass, Unplated	FAA-TSO	5 (Curt	CCA-1650	42	BJ1000A-3, P3750
3/8 NPT	•			Push		Aluminum				CCA-7000	77	
3/8 NPT	•		•	Push			FAA-TSO				105	
3/8 NPT	•			Spiral		Brass, Cad Plate				CCA-4950		BJ1000A-3, P3750
3/8 NPT	•			Spiral		Brass, Unplated				CCA-1350	38	
3/8-24 UNF 3/8-24 UNF			•	Push Push		303 SS 303 SS	FAA-TSO Experiment			CCA-170SS 1	8	
3/8-24 UNF				Push	1/4"	303 SS	Experiment				7	
3/8-24 UNF				Push	1/7	360 Brass	FAA-PMA			CAV-180 1	-	1100B52Z
3/8-24 UNF				Push	1/4"		FAA-PMA			CAV-180H-4 1		11000022
3/8-24 UNF				Push	,	360 Brass				CCA-180-H4		CAV-180H-4
3/8-24 UNF			•	Push		Brass, Unplated	FAA-TSO			CCA-2000 1		CAV-180, 1100B52Z
3/8-24 UNF		•		Push		360 Brass	FAA-TSO			SA32		CCA-2700, F391-32, S2106-1
3/8-24 UNF		•		Push		Brass, Unplated				CCA-2700 7	_	F391-32, S2106-1, SA-32
3/8-24 UNF	•		•	Push	1/4//	360 Brass	FAA-TSO			3750 1		
3/8-24 UNF 1/2-20 UNF	•	•	•	Push Push	1/4"	Aluminum	FAA-TSO FAA-PMA	\neg		3750H 1 SA5020		3651-00
,		-				Anodized		-				C100360, CCA-2900,
1/2-20 UNF		•	•	Push			FAA-TSO			SA82 15		F391-82, S2020-1 C100360, F391-82, SA-82,
1/2-20 UNF		•	•	Push		Brass, Unplated				CCA-2900 7		S2020-2
1/2 NPT	•			Push	2./0//	Brass, Unplated				CCA-1700 7	43	
1/2 NPT	•			Push	3/8"	Brass, Unplated				CCB-37000 7		
1/2 NPT 5/8-18 UNF	•			Spiral Spiral		Brass, Unplated Brass, Unplated		_		CCA-1400 7 CCA-39550 7	65	
5/8-18 UNF	•			Spiral	3/8"	Brass, Unplated				CCA-39560 7	_	
3/4-16 UNF		•	•	Push	3,0	Aluminum Anodized	FAA-TSO	\neg		CCA-75		F75
3/4-16 UNF		•	•	Push		Aluminum	FAA-TSO	9	SAF	F75 3	101	CCA-75
3/4-16 UNF		•		Push		Anodized Aluminum	Experiment	al	Curt	CCA-1200	35	SA5817-4C, 710C-4
3/4-16 UNF		•		Push		Anodized Aluminum	FAA-TSO	9	SAF	SA5817-4C 4	118	CCA-1200, 710C-4
3/4-16 UNF		•		Spiral		Anodized Aluminum	1	-		CCB-36350-1		971D, 971D-1, F75
3/4-16 UNF	•	•		Push		Anodized Alodine/				CCB-36450	88	
3/4-16 UNF	•			Push		Aluminum Aluminum		-		CCB-36450-5 13		
-		•				Anodized Aluminum/		\dashv			-	
3/4-16 UNF	•	•		Push		Nylon Aluminum				10		
2/4 * 6 1		•		Spiral		Anodized		0 (Curt	CCA-7500	79	
3/4-16 UNF	•					Aluminum		\Box				
3/4-16 UNF 3/4-16 UNF 3/4-16 UNF	•	•		Spiral Spiral		Aluminum Anodized Aluminum				CCA-7500-1 10 CCA-7500-2		

Fuel Sytem Fuel and Oil Drain Valves



Fuel and Oil Quick Drain Valves continued from previous page

Continued fi	rom p	revious									
		Flush			Hose Adapter		Approval Type and Conformity		Part Number	Fi or p	n g
Thread	Lock	Mount	Cup	Action	Size		Notes	Mfg	and Notes	19	Alternate P/Ns
3/4-16 UNF	•	•		Spiral		Anodized	None 12	Curt	CCA-7600	2 8	3
3/4-16 UNF	•	•		Spiral		Aluminum Anodized	10	Curt	CCA-7500-5	8	2
7/16-20 UNF				Push		Aluminum Anodized	FAA-TSO	SAF	4350-6L	1.	5
7/16-20 UNF				Push		Brass, Cad Plate	FAA-TSO 7	Curt	CCB-4320	9.	5 110B52Z-G, CAV-170
7/16-20 UNF				Push		Brass, Cad Plate	FAA-TSO 7	Curt	CCA-5800-3	7 7.	5 110B52Z-G, CAV-170
7/16-20 UNF				Spiral		Brass, Cad Plate	FAA-TSO 7	Curt	CCA-5800-1	7 7	4 110B52Z-G, CAV-170
7/16-20 UNF			•	Push		303 SS	Experimental	SAF	170SS	6	5
7/16-20 UNF			•	Push	1/4"		Experimental			5	5
7/16-20 UNF			•	Push		360 Brass	FAA-PMA	SAF	CAV-170		110B52ZG, CCA-4300, 7 CCA-5800-1, CCA-5800-3, CCB-4320
7/16-20 UNF				Push	1/4"				CAV-170H-4	2	8 BJ1000AHS-1
7/16-20 UNF				Push		360 Brass	Experimental	Curt	CCA-170-H4		BJ1000AHS-1, CAV-170H-4
7/16-20 UNF				Push			FAA-TSO		CCA-180SS		
7/16-20 UNF			•	Push		Brass, Unplated	FAA-TSO 8	Curt	CCA-2100	4	7 CAV-170, 110B52ZG
7/16-20 UNF		•	•	Push		360 Brass	FAA-TSO	SAF	SA53S	5 11	.7 CCA-53, F391-53S
7/16-20 UNF		•	•	Push			FAA-TSOb		CCA-53		'A SA53S, F391-53S
7/16-20 UNF		•	•	Push		360 Brass	FAA-TSO		SA72	12	20 CCA-2800, F391-72, S2106-2
7/16-20 UNF		•	•	Push		Brass, Unplated	FAA-TSO	Curt	CCA-2800	5 5	6 F391-72, S2106-2, SA-72
7/16-20 UNF	•		•	Push		360 Brass	FAA-TSO	SAF	4375	10	71D-4, BJ1000AS1M, CCA-4300, CCA-5800-1
7/16-20 UNF	•			Push	1/4"	360 Brass	FAA-TSO	SAF	4375H	1	7 BJ1000AHS1, CCA-5400
7/16-20 UNF	•			Spiral		Brass, Cad Plate	FAA-TSO 7	Curt	CCA-4300	6	110B52Z-G, 4375, CCA-5800-1 BJ1000AS1M, CAV-170, 71D-4
7/16-20 UNF	•			Spiral	1/4"	Brass, Cad Plate	FAA-TSO 9	Curt	CCA-5400	7 7:	3 4375H, BK1000AHS1
9/16-18 UNF				Push		Alum. Anodized				19	
9/16-18 UNF				Push		Brass, Cad Plate	FAA-TSO 8	Curt	CCA-31300	5	8
9/16-18 UNF				Push		Alum. Anodized Red	FAA-TSO 8	Curt	CCA-39500	64	
9/16-18 UNF				Sprial		Brass, Cad Plate			CCA-36400	6	2
9/16-18 UNF	•			Spiral		Brass, Cad Plate	FAA-TSO 8	Curt	CCA-4350	6	8
M16x1.5			•	Push		360 Brass	Experimental				1 Soccata TB-20
M16x1.6			•	Push		360 Brass	Experimental	SAF	CAV-M165H5	3	2

Notes:

- Replacement O-rings: see tables on next page
- 2 Stem can be cut to length per the application
- 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
- Z Lock wire drilled
- Button-style push action
- With stem for turning action
- 10 With screwdriver slot
- III 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
- P/N SA18 has a hex size of 5/8". P/N SA187 has a hex size of 1/2"
- IS Valve inlet is below the threads and O-ring seals against hex face. See figure 117 on page 193.

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
- Conforms to USAF Spec 28208 and 49F9798-51Conforms to USAF Spec 28208, 49F9798-53 and MIL-V-25023
- Conforms to USAF Spec 28208, 49F9798-52, MIL-V-25023 and MS29528-4
 Conforms to USAF Spec 28208, 49F9798-53, MIL-V-25023 and MS29528-6
- 9 Conforms to USAF Spec 28208 and MIL-V-25023
- Oonforms to USAF Spec 28208, MIL-V-25023 and MS29571
- Conforms to USAF Spec 49F9798-53 and MIL-V-25023
- 12 For non-certified aircraft only











See page 193 for product images

Fuel Sytem

Fuel and Oil Drain Valves



Replacement Seals SAF-AIR Seal Kits

- Add "K" or "-K" to the valve P/N to find the P/N for the applicable seal kit
- Seal kits only applicable for SAF-AIR valves with note 1 above
- · All O-rings are made of Viton



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

Flush Valve Fuel Plate

Supports when added stability is needed to mount a flush mount valve directly into a wet wing or fuel tank

- 2¾" overall diameter, 1½" from mounting surface to bottom hole diameter
- CCB-36450-5 flush mounted fuel drain valve is included



Manufactured by Curtis Superior Valve Co.

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

Replacement Seals

FAA-PMA approved seals for Curtis Valves

Manufactured by PMA Products

Seal P/N	Valve P/N	Aircraft	Serial Number	ID (in)	OD (in)	Thickness (in)	
		B55	TC-1608 thru TC-2071				
CACCA1269	CCA-4850	E55	TE-938, TE-943 thru TE-1102	0.100	0.280 - 0.285	0.064 - 0.068	
		58	TH-1 thru TH-2124				
		B55	TC-1608 and On			0.058	
CACCA1319	CCA-3400	E55	TE-938, TE-943 and On	0.150	0.350		
		58	TH-1 thru TH-2124				
Note: Use w	Note: Use with autogas not recommended.						





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,						
C31-76	Fits all 7/6 Hex valves	CCA-39560						
CST-716	Fits all 7/16 Hex Valves	CCA-1250, CCA-1550, CCA-4850, CCA-7450, CCA-9950,						
C31-710	Fits all 7/16 Hex valves	CA-36150, CCB-36750						
CST-916	Fits all 9/16 Hex Valves	CCA-1300, CCA-1600, CCA-4800, CCA-4900, CCA-39000						
CCT 1116	Fits all 11/16 Hay Valves	CCA-1350, CCA-1650, CCA-2440, CCA-2450, CCA-2460, CCA-2450, CCA-2450, CCA-2450, CCA-2450, CCA-5800-1						
C51-1116	Fits all 11/16 Hex valves	CCB-4320, CCA-4950, CCA-5400, CCA-5800-1						
	For removal of certain							
CST-36450	Curtis flush mounted	CCB-36450, CCB-36450-5						
	valves							

Curtis Fuel Sampling Cup P/N MCCCA-39680

Pin diameter: 1/8"

- Stainless steel pin and fuel-resistant 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.

With our McFarlane logo!



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 RM12175



P/N CCA-2474









P/N F50-90

P/N F50-180

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

P/N	Thread	Material	Description
AN6-INV		2011 Aluminum	Christen inverted oil system
AN8-INV		2011 Aluminum	Christen inverted oil system
AN10-INV		2011 Aluminum	Christen inverted oil system
CCA-2470	12MM 1.75	Aluminum	Rotax 90-Degree adapter for CCA-2450 oil drain valve
CCA-2474	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	1/2-20 UNF	2011 Aluminum	Banjo Bolt, Rotax for S5020J oil drain valve
M1490B			Banjo Bolt, Volkswagen for S5020J oil drain valve
RM12175		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			Banjo Bolt, Jabiru for S5020J oil drain valve
S6290B	5/8-18 UNF	2011 Aluminum	Banjo Bolt, Continental for S6250 oil drain valve

Fuel Sytem Fuel and Oil Drain Valves



Locking Oil Drain Valves

Features a detent to lock in the open position

Thread: "UNF" (Fine thread) type are straight, non-sealing threads that rely on an O-ring to 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.



	Open	Hose Adapter						See Figure
Thread	Action	Size	Material	Approval	OEM	Part Number		on pg 193
1/2-14 NPT	Push	3/8"	Aluminum, Anodized	FAA-PMA	Curtis	CCB-5000	New!	121
1/2-14 NPT	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	P5000	3	106
1/2-14 NPT	Push		Aluminum	FAA-PMA	Curtis	CCB-38000	8	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
	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"	Aluminum, Anodized	FAA-PMA	Curtis	CCB-6250	New!	122
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		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		3/8"	Aluminum	None 6	Curtis	CCB-32000	New!	76
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

- 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.
- 3 2-piece, low profile. P/N F50-180 opener (attaches straight out of valve) included. P/N F50-90 opener available (attaches at 90° angle).
- 6 For non-certified aircraft only
- 7 For use on UL engines
- Includes P/N CCB-38000 or CCB-32000 valve and P/N CCA-38001 activation tool.

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 appropriate aircraft 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 10 years when no guidance is given. McFarlane stocks replacement seals and seal kits for 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 disassemble and replace the O-rings. If the valve starts to leak over time, ensure the drain valve is tight. If the valve is tight, 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 valves. Add "K" or "-K" suffix to the valve part number.

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

Thread Specif	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 Threa	ds 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

www.mcfarlaneaviation.com

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 5 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	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-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			
Manufacture	Manufactured by Curtis Superior Drain Co., Inc.				

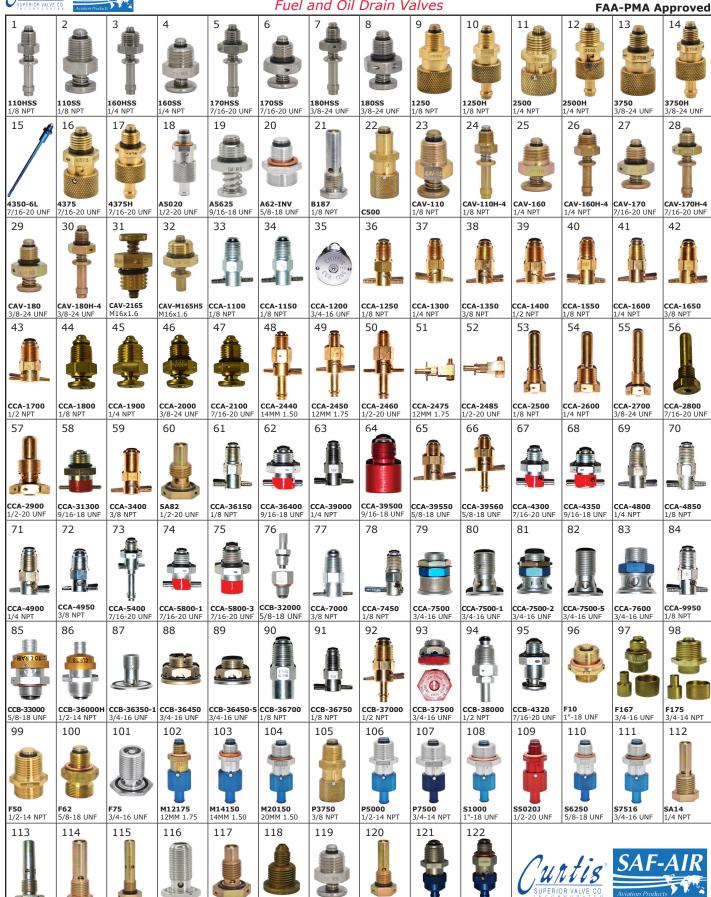




Fuel Sytem Fuel and Oil Drain Valves



System



SA187

SA32

3/8-24 UNF

SA5020

1/2-20 UNF

SA53S

7/16-20 UNF

SA5817-4C

SA-60S

SA18

CCB-6250

CCB-5000

1/2-14 NPT

7/16-20 UNF

Photos are not to scale relative to each other