

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



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



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.

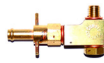
Use Pin Type Cup: Pin type cups similar to P/N CCA-39680 or MCCA-39680 may be used with indicated valves for sampling fuel.

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	22	CCA-3400
	•			Spiral	1/2"	Brass, Unplated	FAA-TSO-C76	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	24	BJ1000AH1
1/8 NPT				Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-36150	61	BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		360 Brass	FAA-PMA	SAF-AIR	CAV-110	23	BJ1000AS1MY, CCA-1250, CCA-1550, CCA-36150, CCA-7450, CCB-36700
1/8 NPT			•	Push		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCB-36700	90	BJ1000AS1MY, CAV-110
1/8 NPT			•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1800	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	113	491-806, CCA-2500, F391-18, S2106-3
1/8 NPT		•	•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	SA187	114	491-806, CCA-250, F391-187, S2106-3
1/8 NPT		•	•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-2500	53	491-806, F391-187B, F391-88, S2106-3, SA-18, SA-187
1/8 NPT	•			Push		Brass, Unplated	FAA-TSO-C76	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	9	BJ1000A-1, CCA-1250, CCA-1550, CCA-7450
1/8 NPT	•			Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	1250H	10	BJ1000AH1
1/8 NPT	•			Spiral		Anodized/Aluminum	Experimental	Curtis	CCA-1100	33	
1/8 NPT	•			Spiral		Anodized/Aluminum	FAA-TSO-C76	Curtis	CCA-1150	34	
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4850	70	1250, 492-100, 492-022, BJ1000A-1
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-7450	78	BJ1000AS1MY, CAV-110, CCA-1250
1/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-9950	84	
1/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1250	36	1250, 492-100, 492-022, BJ1000A-1, BJ1000AS1MY, CAV-110
1/8 NPT	•			Spiral		Stainless Steel	FAA-TSO-C76	Curtis	CCB-36750	7	1250, 492-100, 492-022, BJ1000A-1, BJ1000A-2
1/4 NPT				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-160H-4	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	25	BJ1000AS1MX, CCA-1300, CCA-1600, CCA-4900
1/4 NPT			•	Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1900	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	54	F391-14, SA-14
1/4 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	2500	11	BJ1000A-2, CCA-1300, CCA-1600, CCA-4900
1/4 NPT	•		•	Push	1/4"	360 Brass	FAA-TSO-C76	SAF-AIR	2500H	12	BJ1000AH2
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-3600	60	
1/4 NPT	•			Push		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4800	69	
1/4 NPT	•			Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1600	41	2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4900	71	2500, BJ1000A-2
1/4 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1300	37	2500, BJ1000A-2
1/4 NPT	•			Spiral		Stainless Steel	FAA-TSO-C76	Curtis	CCA-39000	63	
3/8 NPT	•			Push		Brass, Unplated	FAA-TSO-C76	Curtis	CCA-1650	42	BJ1000A-3, P3750
3/8 NPT	•			Push		Anodized/Aluminum	None	Curtis	CCA-7000	77	
3/8 NPT	•		•	Push		360 Brass	FAA-TSO-C76	SAF-AIR	P3750	105	
3/8 NPT	•			Spiral		Brass, Cad Plate	FAA-TSO-C76	Curtis	CCA-4950	72	BJ1000A-3, P3750
3/8 NPT	•			Spiral		Brass, Unplated	FAA-TSO-C76	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	29	1100B52Z
3/8-24 UNF				Push	1/4"	360 Brass	FAA-PMA	SAF-AIR	CAV-180H-4	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	18	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 ¹¹	Curtis	CCA-1700	7	43
1/2 NPT	•		•	Push	3/8"	Brass, Unplated	FAA-PMA ⁹	Curtis	CCB-37000	7	92
1/2 NPT	•		•	Spiral		Brass, Unplated	FAA-TSO-C76 ¹¹	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	Curtis	CCA-39560	7	66
3/4-16 UNF		•	•	Push		Aluminum Anodized	FAA-TSO-C76	SAF-AIR	F75	8	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		Curtis	CCB-36350-1	10	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		Curtis	CCB-36450-5	18	89
3/4-16 UNF	•	•	•	Push		Aluminum/Nylon	FAA-TSO-C76 ¹⁰	Curtis	CCB-37500	18	93
3/4-16 UNF	•	•	•	Spiral		Aluminum Anodized		Curtis	CCA-7500	10/11	79
3/4-16 UNF	•	•	•	Spiral		Aluminum Anodized		Curtis	CCA-7500-1	10	80
3/4-16 UNF	•	•	•	Spiral		Aluminum Anodized		Curtis	CCA-7500-2	10/12	81
3/4-16 UNF	•	•	•	Spiral		Aluminum Anodized	None	Curtis	CCA-7600	12	83
3/4-16 UNF	•	•	•	Spiral		Aluminum Anodized		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	18	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		•	•	Spiral		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:

- Replacement O-rings: see tables to the right
- Stem can be cut to length per the application
- Used on bladder style wing tanks
- Hose attaches to the valve with a 7/16-20 flare fitting
- Can be used in highly corrosive applications such as salt water.
- One arm stem with turn-to-lock action
- Lock wire drilled
- Button-style push action
- With stem for turning action
- With screwdriver slot
- With screen over screwdriver slot and mounting hardware
- With mounting hardware (washer & two nuts installed)
- 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".
- Valve inlet is below the threads and O-ring seals against hex face.
See fig. 117 on pg 56.

Conformity Notes:

- Conforms to USAF Spec 28208
- Conforms to USAF Spec 49F9798-49
- Conforms to USAF Spec 28208 and 49F9798-49
- Conforms to USAF Spec 28208 and 49F9798-50
- Conforms to USAF Spec 28208 and 49F9798-51
- Conforms 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
- Conforms to USAF Spec 28208 and MIL-V-25023
- Conforms to USAF Spec 28208 and MIL-V-25023
- Conforms to USAF Spec 28208, MIL-V-25023 and MS29571
- Conforms to USAF Spec 49F9798-53 and MIL-V-25023
- For non-certified aircraft only

Curtis Fuel Sampling Cup with McFarlane Logo P/N MCCA-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.



Fuel Valve P/N	Curtis Field Replaceable O-rings	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



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
























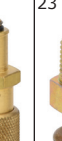

























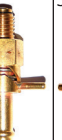






















































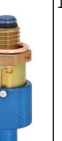

















Supports applications where added stability is needed to mount a flush mount valve directly into a wet wing or fuel tank. CCB-36450-5 flush mounted fuel drain valve is included.

- 2 3/4" Overall Diameter
- 1 1/2" 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  SA535 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 3/8-24 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.



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	106
1/2-14 NPT	Push		Aluminum	None	6 Curtis	CCA-38000	94
1/2-14 NPT	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F50	99
1/2-14 NPT	Push		Aluminum	None	6 Curtis	CCA-36000H New!	86
1/2-20 UNF		3/8"		None	6 SAF-AIR	A5020	18
1/2-20 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S5020J	109
1/2-20 UNF	Spiral	3/8"	Brass, Unplated	None	6 Curtis	CCA-2460	50
1/2-20 UNF	Spiral	3/8"	Brass, Unplated	None	6 Curtis	CCA-2485	52
3/4-14 NPT	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	P7500	107
3/4-14 NPT	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F175	98
3/4-16 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S7516	111
3/4-16 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F167	97
5/8-18 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S6250	110
5/8-18 UNF		3/8"	2011 Aluminum, 302 Stainless	None	6 SAF-AIR	A62-INV	20
5/8-18 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F62	100
5/8-18 UNF	Push	3/8"	Aluminum	None	6 Curtis	CCA-33000 New!	85
1"-18 UNF	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	S1000	108
1"-18 UNF	Spiral	3/8"	360 Brass, 302 Stainless	FAA-PMA	SAF-AIR	F10	96
12MM 1.75	Push	3/8"	2011 Aluminum, 302 Stainless	FAA-PMA	SAF-AIR	M12175	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	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	104
		3/8"	2011 Aluminum, 302 Stainless	7	SAF-AIR	M14150	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 F50-180 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	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 NPT	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	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.