

1965-66 "V8"

BUICK

AFB FOUR-BORE DOWN-DRAFT CLIMATIC CONTROL CARBURETOR NO. 4453S

YEAR AND MODEL	ENGINE DISPL.	SERVICE CARB. NO.	ZIP KIT NO.	GASKET SET NO.
1965-66 Wildcat, Electra 225 A/T	401	4453	902-185A	519A
1966 Skylark, Gran Sport A/T	400	4453	902-185A	519A

AFB - 4453S Replaces Carburetor Nos. 3921 - 4053 - 4180.

CARBURETOR SPECIFICATIONS

FOR 8 CYLINDER ENGINE: VACUUM AT IDLE 14 INCHES

Carb. No.	Thro. Bore Prim. & Sec. Size	Main Venturi Prim. & Sec. Size	Vents In Air & Body Amt.	Idle Speed Jet In Prim. Venturi Size	Idle By-Pass In Prim. Venturi Size	Idle Econ. In Prim. Venturi Size	Idle Bleed In Prim. Venturi Size	Idle Port Size	Anti-Perc. Bleed In Prim. & Sec. Venturi Size	Main Vent Tube Prim. & Sec. Venturi Amt. Side Holes	Sec. Pick Up Tube (T) & Discharge Port (P); Bleed (B) Size	Pump Jet In Prim. Venturi Size	Choke Setting	Vacuum Spark Port Size
4453S	1 ⁹ / ₁₆ (P) 1 ¹¹ / ₁₆ (S)	1 ³ / ₁₆ (P) 1 ⁹ / ₁₆ (S)	13	.035	.0511	.043	.0531	.200x.030 x.051	.036 (P) .031 (S)	6 (P) 3 (S)	.052 (P) .0292 (B)	.025	Index	None

MOTOR TUNE-UP — BE ACCURATE

Spark Plug Gap .035"	Breaker Point Setting 30° Dwell	Ignition Timing Breaker Points to Open: 2½ B. T. C. At Vibration Damper Vacuum Hose Disconnected	Float Setting See Adjustments	Idle Mixture Screw Setting ½ to 1½ Turns Open Idle R.P.M. 500 to 550 A/T In Drive Range.
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FLOAT ALIGNMENT: Side of floats parallel to edge of casting. Minimum clearance between lever and air horn lugs without binding. To adjust, bend float lever.

FLOAT LEVEL: 15/64 inch plus or minus 1/64 inch, between top of floats (at outer end) and air horn gasket. To adjust, bend float lever.

FLOAT DROP: 23/32 inch plus or minus 1/16 inch between top of floats (at outer end) and air horn gasket. To adjust, bend stop tabs on float brackets.

PUMP: 7/16 inch from the top of the bowl cover to the top of the plunger shaft with throttle connector rod in center hole (medium stroke) of pump arm with throttle valves tightly closed. To adjust, bend throttle connector rod.

CHOKE PISTON LINKAGE ADJUSTMENT: (1) Bend a .026 inch wire gauge at a 90° angle approximately 1/8 inch from its end. (2) Open the choke valve and insert the wire gauge so that the bent portion is between the top of the slot in the choke piston cylinder and the bottom of the center of slot in the piston. Hold the wire gauge in position and close the choke valve by pressing on the piston lever in the choke housing until resistance is felt. There should now be .106 inch plus or minus .005 inch between the top of the choke valve and inner wall of air horn. (3) To adjust, bend choke connector rod.

FAST IDLE LINKAGE ADJUSTMENT: With choke valve closed center index mark on cam should align with adjusting screw. To adjust, bend fast idle connector rod.

NOTE: It may be necessary to bend stop lug on fast idle cam.

FAST IDLE THROTTLE VALVE CLEARANCE: .033 inch dia. between lower edge of valve and bore with adjusting screw on index mark on cam.

FAST IDLE ON CAR: 600 R.P.M. hot engine with fast idle screw on lowest speed step of cam. A/T in drive.

UNLOADER: 7/32 inch between upper edge of choke valve and inner wall of air horn with throttle valves wide open. To adjust, bend unloader lip on throttle lever.

SECONDARY THROTTLE LEVER ADJUSTMENT: (1) Block choke valve wide open. (2) With 23/64 inch between lower edge of primary valve and bore (opposite idle port) secondary valves should just start to open. To adjust, bend throttle operating rod. **NOTE:** Secondary throttle valves will be a few degrees from wide open when primary valves are wide open. Upper edge of secondary valve should just contact auxiliary valve when auxiliary valve is wide open. If necessary, bend stop lug on secondary lever to prevent secondary valves from going past wide open. (3) With primary and secondary throttle valves tightly closed, there should be .010 inch to .030 inch between positive closing shoes on primary and secondary throttle lever. To adjust, bend shoe on secondary lever.

SECONDARY THROTTLE LOCK-OUT ADJUSTMENT: Crack throttle valves and manually open and close the choke valve. Tang on secondary throttle lever should freely engage in notch of lock-out dog. To adjust, bend tang on secondary throttle lever.

PARTS LIST

Part No.	PART NAME	Part No.	PART NAME
1A-119	Flange gasket	65-43	Step-up piston cover plate (2)
2-211	Primary throttle valve (2)	101-65	Choke shaft lever screw (2)
2-281	Secondary throttle valve (2)	101-74	Throttle shaft lever screw (2)
3-12775	Auxiliary throttle shaft, valve and weight assembly	101-136	Coil housing screw (3)
3-15005	Primary throttle shaft and lever assy.	101-1525	Air horn screw assy.
3-16335	Secondary throttle shaft and lever assy.	101-1845	Pump jet screw assy. (2)
4A-175	Primary throttle shaft dog	101-323	Fast idle cam screw
7-288	Choke valve	101-3625	Air horn screw assy. (8)
11B-35	Rivet plug	101-3795	Primary and Secondary venturi screw assy. (8)
11B-79	Rivet plug (2)	101-419	Secondary throttle valve screw (4)
11B-194	Pipe plug	101-420	Primary throttle valve screw (4)
11B-389	Idle port rivet plug (2)	101-421	Pump arm screw
11B-390	Passage plug (primary) (2)	101-4315	Air horn screw assy.
11B-406	Passage plug (secondary) (2)	101-436	Piston housing screw (3)
11B-407	Rivet plug	101-452	Idle speed screw
11B-439	Primary venturi plug (2)	101-4535	Thermostatic valve screw (2)
14-6095	Choke piston lever and link assy.	101-484	Fast idle speed screw
14-6125	Choke shaft and lever assy. (piston housing)	101-558	Choke valve screw (2)
14-619	Choke shaft lever	101-560	Step up piston cover plate screw (2)
14-620	Cam trip lever	103-14	Lead shot (.180")
14-8205	Choke lever and shaft assy.	103-16	Lead shot (.200")
16-219	Step up rod (.0685" x .063") Standard (2)	111-76	Pump arm (2)
16-252U	Step up rod package (2) 16-255, (2) 61-400, (2) 120-233 - 1 size lean	114-146	Primary throttle shaft arm (outer)
17-51	Pump discharge check needle	114-147	Primary throttle shaft arm (inner)
20-43	Piston housing gasket	115-285	Choke connector rod
20-127	Fuel inlet fitting gasket	115-308	Throttle operating rod
20-204	Needle seat gasket (2)	115-314	Fast idle connector rod
21-1795	Float and lever assy. (2)	115-372	Pump connector rod
24-29	Float lever pin (2)	117-190	Pump connector link
25-7365	Needle and seat assy. (use 25-8605) (2)	120-158	Secondary metering jet (.082") (2)
25-8605	Needle and seat assy. (flared tip needle) (2)	120-392	Primary metering jet (.092") (2)
30A-81	Idle mixture screw (2)	121-287	Pump jet housing gasket
47-30	Piston housing welsh plug	121-292	Air horn gasket
47-36	Secondary venturi welsh plug (2)	121-293	Secondary venturi cluster gasket (2)
48-2695	Pump jet and housing assy.	121-302	Primary venturi cluster gasket (2)
53A-412	Lockout dog	121-314	Thermostatic valve gasket
53A-430	Secondary throttle operating lever	121-500	Coil housing gasket
58-3475	Secondary venturi assy. (choke side)	122-1085	Pump intake ball check assy.
58-3485	Secondary venturi assy. (pump side)	136-34	Choke piston lever retaining washer
58-6965	Primary venturi assy. (choke side)	136-159	Primary throttle shaft washer
58-6975	Primary venturi assy. (pump side)	136-160	Secondary throttle shaft washer
61-58	Fast idle screw spring	136-174	Idle speed screw washer
61-84	Idle mixture screw spring (2)	150-183	Choke piston pin
61-259	Vacuum piston spring (2)	150A-10	Pin spring (6)
61-291	Idle speed screw spring	156-1165	Fuel inlet fitting assy.
61-398	Pump spring (lower)	160-296	Choke piston
61-483	Secondary throttle return spring	160-207	Step-up piston (2)
61-585	Step-up rod retaining spring (2)	169-925	Thermostatic valve assembly
61-623	Throttle flex spring	170-9265	Piston housing and plug assy.
61-624	Fast idle cam spring	170BE-4785	Thermostatic coil and housing assy.
63-58	Coil housing retainer (3)	181-3525	Fast idle cam assembly
64-2175	Pump plunger assy.	186-70	Fuel bowl baffle (2)
		186-106	Flange baffle plate
		186-1095	Choke baffle plate assy.