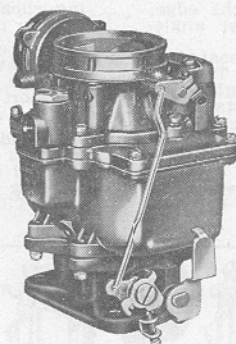


Form 5105—U. S. A.  
 Carb. 2146S Kaiser 1954  
 150-62 Sup. by  
 150-170 Choke piston pin  
 25-105S Sup. by  
 25-80S Needle and seat assembly

Model  
 Manhattan "K542"  
 (With Supercharger)



KAISER  
 1954

WCD Dual Down-Draft Climatic® Control Carburetor No. 2146S

### CARBURETOR SPECIFICATIONS

For Six Cylinder Engine: 3-5/16 Inch Bore, 4 3/8 Inch Stroke

**Dimensions:** Flange size, 1 1/4 inch dual, 4 bolt type.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 9/32 inch I. D.

Main venturi, 1-3/16 inch I. D.

**Float Level:** See adjustments.

**Vents:** Inside, none. Outside, No. 35 (.10 inch) drill 2—holes.

**Gasoline Intake:** Size No. 42 (.0935 inch) drill in needle seat.

**Low Speed Jet Tube:** Jet, size No. 62 (.038 inch) drill.

By pass, in bowl cover, size No. 56 (.0465 inch) drill. Economizer, in bowl cover, size No. 63 (.037 inch) drill. Idle bleed, in bowl cover, size No. 55 (.052 inch) drill.

**Idle Port:** Upper, slot type, length .165 inch; width, .030 inch.

**Idle Port Opening:** Top of port .122-.128 inch above upper edge of valve with valve tightly closed.

**Lower Port (For Idle Adjustment Screw):** Size .0615 to .0655 inch diameter.

**Set Idle Adjustment Screw:** 1/2 to 1 1/2 turns open. For richer mixture turn screw out. Idle engine at 500 r.p.m. (Gear shift lever in neutral).

**Main Nozzle:** Nozzle is installed permanently. DO NOT REMOVE.

**Metering Rod (Vacuometer Type):** Economy step .0735 inch diameter. Middle step tapers to .069 inch diameter. Power step .051 inch diameter.

**Main Metering Jet:** .091 inch diameter.

**Metering Rod Setting:** See adjustments.

**Accelerating Pump:** Discharge jet (twin) size, No. 74 (.0225 inch) drill.

Intake disk check size, No. 30 (.1285 inch) drill.

Discharge (needle seat) size, No. 62 (.038 inch) drill.

Relief ball check size, No. 55 (.052 inch) drill.

**Pump Adjustment:** See adjustments.

**Choke:** Carter Climatic® Control, set on index. Offset butterfly type. Bleed hole, size .156 inch diameter in valve. Choke heat suction hole, in bowl cover, size No. 32 (.116 inch) drill.

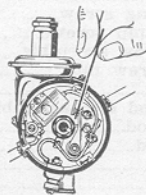
**Vacuum Spark Port:** .062 to .064 inch diameter. Top of port .052 to .056 inch above valve with valve tightly closed.

### Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

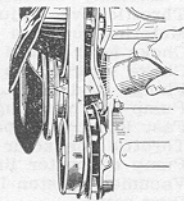
**CAUTION:** Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



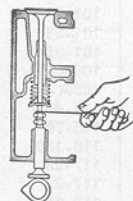
Spark Plug  
 Gap  
 .030"



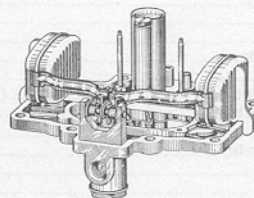
Breaker Point  
 Setting  
 .022"



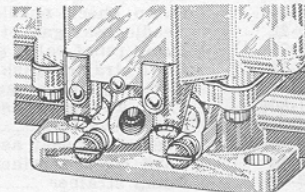
Ignition Timing  
 Breaker Points to Open:  
 4° B. T. D. C.



Valve Setting  
 (Cold)  
 Int. .014"  
 Exh. .014"



Float Setting  
 (See Adjustments)



Idle Adjustment  
 Screw Setting  
 1/2 to 1 1/2  
 Turns Open

### CARBURETOR ADJUSTMENTS

**Float Adjustment:** Two separate float adjustments must be made—lateral and vertical. **LATERAL ADJUSTMENT:** With bowl cover assembly inverted, bowl cover gasket removed and float resting on seated needle, place float gauge T109-162 directly under float with notched portions of gauge fitted over edges of casting. Sides of floats should barely touch the vertical uprights of float gauge. Adjustment should be made by bending arms of floats. **VERTICAL ADJUST-**

**MENT:** With float gauge in same position floats should just clear the horizontal portion of gauge. (Vertical distance between top of float, and machined surface of casting must be 3/16 inch.) Adjust by bending float arms. Remove float, install bowl cover gasket and then reinstall float.

**Pump Adjustment:** Install pump connector link in lower hole (short stroke) of pump arm with ends extending toward countershaft arm. Back out throttle lever set screw until

# CARTER CARBURETOR CORPORATION, ST. LOUIS, MO., U. S. A.

throttle valves seat in bores of carburetor. Hold straight edge across top of dust cover boss at pump arm. The flat on top of pump arm should be parallel to straight edge. Adjust by bending throttle connector rod at lower angle. (Use tool T109-213.)

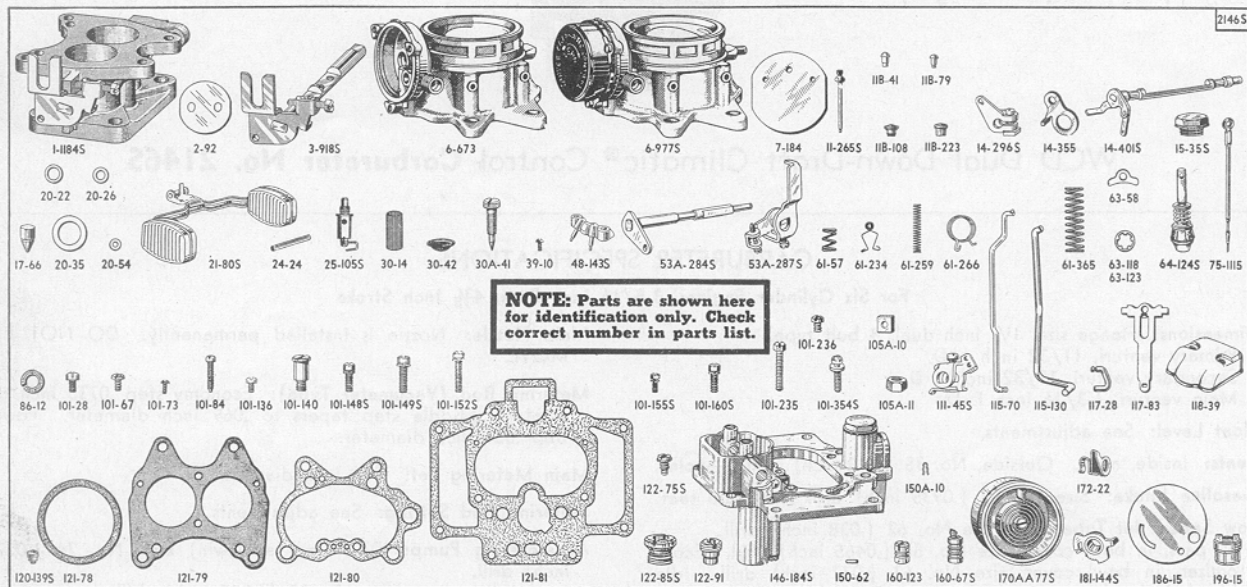
**Metering Rod Adjustment:** With throttle valves seated in bores of carburetor, insert one metering rod gauge T109-163 in place of either metering rod. Press down lightly on vacuum piston link until lug of piston link contacts lip of metering rod arm. There should be less than .005" clearance between metering rod bearing and shoulder in notch of gauge. Adjust by bending lip of metering rod arm (tool T109-105).

**Fast Idle Adjustment:** Loosen choke lever clamp screw on choke shaft. Insert .040 inch feeler gauge T109-193 between

lip of fast idle cam and boss of flange casting. Hold choke valve tightly closed and take slack out of linkage by pressing choke lever towards closed position—hold in place and tighten clamp screw.

With choke valve tightly closed, tighten fast idle adjusting screw until there is .026 inch (gauge T109-189) opening between throttle valve and bore of carburetor (side opposite idle port). Be sure fast idle adjusting screw is on high step of cam while making this adjustment.

**Unloader Adjustment:** With throttle wide open there should be 7/32 inch (gauge T109-106) clearance between upper edge of choke valve and inner wall of air horn. Adjust by bending unloader lip on throttle shaft lever. Use bending tool (T109-41).



## Kaiser—1954—Carburetor No. 2146S

WHEN SERVICING, USE GASKET ASSORTMENT No. 189

Part No.	PART NAME
1-1184S	—Body flange assembly.....
2-92	Throttle valve.....(2)
3-918S	—Throttle shaft and lever assembly.....
6-673	—Air horn.....
6-977S	—Air horn and Climatic® control assembly.....
7-184	Choke valve.....
11-265S	—Low speed jet assembly.....(2)
11B-41	Rivet plug.....(2)
11B-79	Rivet plug.....(3)
11B-108	Idle port rivet plug.....(2)
11B-223	Nozzle passage rivet plug.....(2)
14-296S	Choke lever and screw assembly.....
14-355	Cam trip lever.....
14-401S	Choke piston lever, link and shaft assembly.....
15-35S	Strainer nut assembly.....
17-66	Pump check needle.....
20-22	Needle seat gasket.....
20-26	Pump relief valve gasket.....
20-35	Bowl strainer gasket.....
20-54	Metering rod jet gasket.....(2)
21-80S	Float and lever assembly.....
24-24	Float lever pin.....
25-105S	Needle and seat assembly.....
30-14	Bowl cover strainer.....
30-42	Pump strainer.....
30A-41	Idle adjustment screw.....(2)
39-10	Choke valve attaching screw.....(2)
48-143S	Pump jet and housing assembly.....
53A-284S	Pump operating lever and countershaft assembly.....
53A-287S	Fast idle arm and screw assembly.....
61-57	Idle adjustment screw spring.....(2)
61-234	Metering rod spring.....
61-259	Vacuum piston spring.....
61-266	Fast idle cam spring.....
61-365	Pump spring (Lower).....
63-58	Coil housing retainer.....(3)
63-118	Throttle shaft retaining ring.....
63-123	Choke shaft retaining ring.....
64-124S	Pump plunger, rod, spring and retainer assembly.....
75-111S	—Metering rod—standard.....(2)
86-12	Flange stud lock washer.....(4)
101-28	Fast idle arm screw.....
101-67	Pump plunger guide screw.....

Part No.	PART NAME
101-73	Throttle valve attaching screw.....(4)
101-84	Fast idle adjustment screw.....
101-136	Coil housing attaching screw.....(3)
101-140	Fast idle cam attaching screw.....
101-148S	Dust cover attaching screw and washer assembly.....(2)
101-149S	Body flange attaching screw and washer assembly.....(4)
101-152S	Air horn attaching screw and washer assembly.....(4)
101-155S	Pump jet housing attaching screw and washer assembly.....(2)
101-160S	Bowl cover attaching screw and washer assembly.....(6)
101-235	Throttle lever adjusting screw.....
101-236	Metering rod arm clamp screw.....
101-354S	Choke lever clamp screw assembly.....
105A-10	Choke lever clamp screw nut.....
105A-11	Flange stud nut.....(4)
111-45S	Pump and metering rod arm assembly.....
115-70	Fast idle connector rod.....
115-130	Throttle connector rod.....
117-28	Pump connector link.....
117-83	Vacuum piston link.....
118-39	Dust cover.....
120-139S	Metering rod jet assembly.....(2)
121-78	Coil housing gasket.....(2)
121-79	Body flange gasket.....
121-80	Air horn gasket.....
121-81	Bowl cover gasket.....
122-75S	Pump relief valve assembly.....
122-85S	Intake disk check assembly.....
122-91	Pump discharge check seat plug.....
146-184S	Bowl cover assembly.....
150-62	Choke piston pin.....
150A-10	Pin spring.....(3)
160-67S	Vacuum piston and pin assembly.....
160-123	Choke piston.....
170AA77S	—Thermostatic coil and housing assembly.....
172-22	Throttle connector rod retainer.....
181-144S	Fast idle cam assembly.....
186-15	Choke baffle plate.....
196-15	Pump plunger guide.....

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.