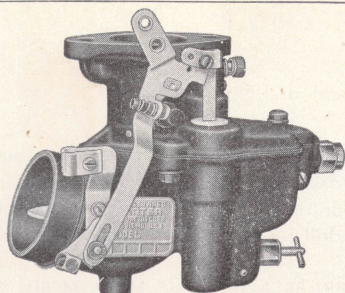


EFFECTIVE JANUARY 1, 1947, ADD 20% TO LIST PRICE OF CARBURETERS AND 5% TO ALL OTHER PRICES SHOWN WITH FRACTIONAL ADJUSTMENT TO NEAREST EVEN CENT.

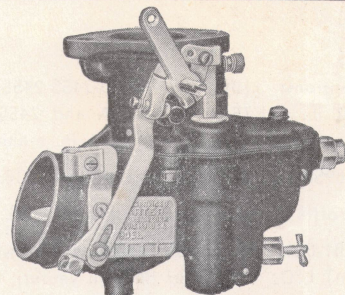


BB1-245S—1 inch Flange Size
BB1-Special—1 1/4 inch Flange Size
(The above superseded by BB1A or BB1D and 245SA or 245SD)

BB1-BB1A-BB1D-245S-245SA-245SD
LIST PRICE \$13.00

289S-289SD
LIST PRICE \$15.00

Exchange allowance of \$2.00 is made when old carburetor is returned.



245SA-245SD—1 inch Flange Size
BB1A-BB1D—1 1/4 inch Flange Size
289S-289SD—1 1/2 inch Flange Size

THE CARBURETERS

BB1 and 245S carbureters have throttle lever riveted on shaft. BB1A, 245SA and 289S carbureters have throttle lever adjustable on shaft to facilitate installation where variations occur in the length of the accelerator or hand throttle rods.

BB1D, 245SD and 289SD carbureters have die-cast lower body. Early production 245SD, BB1D and 289SD used float lever pin and plug assembly inserted from outside of body.

Later production (starting October 1, 1945, designated as H-45 on inspection tag) uses float pin and pin retainer in slot in bowl.

CARBURETOR ADJUSTMENTS

High Speed Adjustment

Adjustable main metering screw controls fuel supply above idling speed. Turning screw in, gives leaner mixture. Turning screw out, gives richer mixture. In adjusting, do not sacrifice power or performance for economy.

After motor has reached normal running temperature and correct idle adjustment has been made, open throttle to about 35 miles per hour engine speed. Turn metering screw OUT until motor reaches maximum speed, then IN until engine speed starts to decrease. Now open screw slowly until motor reaches maximum speed. This adjustment will give maximum power and economy.

Idle Adjustment

First, set throttle lever adjusting screw so that motor runs approximately 300 rpm. Then set idle adjustment screw so that motor fires evenly. (Most mechanics prefer to use a vacuum gauge, setting idle adjusting screw to highest vacuum.)

Note: A richer mixture is obtained by backing out adjustment screw—a leaner mixture by turning screw in.

The Accelerating Pump

The pump operates in a well in the body casting. At opening of throttle, pump discharges through main nozzle, starting a flow of fuel through nozzle from main float chamber and supplying instantly the excess fuel necessary for prompt acceleration.

Pump link is provided with two holes to receive pump link screw, giving short and long strokes to pump piston. For winter driving, in Northern climates, link screw should be set in outer (top) hole, which gives longer stroke, supplying maximum quantity of fuel for acceleration.

If this does not give desired results, the main metering jet, check valve assembly and pump valve assembly should be removed and cleaned with compressed air.

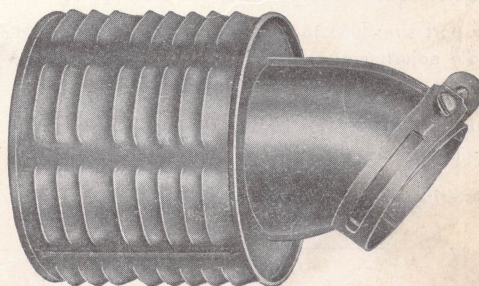
If Motor Loads—Check Float Level

To check float level, remove upper casting from float chamber. Remove body gasket and place gauge T109-49 across machined edges of float chamber. Hold lip of float firmly against end of seated needle.

Top of float (not soldered seam) should just touch float gauge.

Before adjusting float, see that float lever pin plug is firmly seated. To lower float level, bend lip of float lever toward needle. To raise float level, bend lip away from needle. A very slight bend is usually sufficient.

Be sure to bend lip of float, not bracket, holding lip against needle with needle firmly seated.



No. 90-155

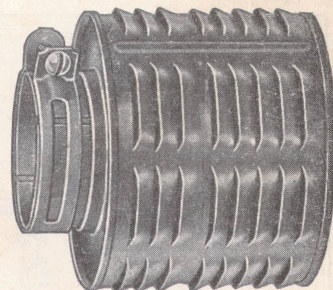
AIR CLEANERS

The air cleaners illustrated are recommended for use with the BB carburetors.

When ordering air cleaners, specify No. 90-125 for Oldsmobiles.

No. 90-145 or 90-155 for other BB installations.

LIST PRICE \$3.00



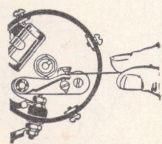
No. 90-145

Motor Tune-up—Be Accurate! Always Use Feeler Gauges!

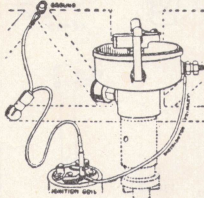
CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



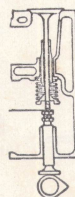
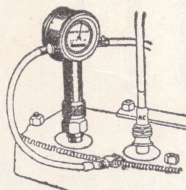
Gauge Spark Plug Gap



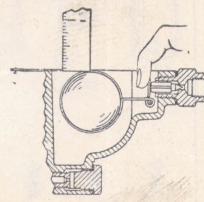
Set Breaker Points



Adjust Ignition Timing Use Timing Light or Use Motor Gauge



Set Valves With Motor at Normal Operating Temperature (Hot)



Set Float Level 1/32"-1/16" Below Top Edge of Casting

These adjustments must be accurate and in conformity with manufacturer's specifications.

CARBURETER SPECIFICATIONS

Dimensions: (BB1-BB1A-BB1D-245S-245SA-245SD) Flange size, 1 1/4 in. (31.75 mm) (245SA and 245SD have 1 1/4 in. (SAE) flange but holes drilled for 1 in. manifold).

(289S-289SD) Flange size, 1 1/2 in. (38.10 mm).

Throttle bore, 1-7/16 in. (36.51 mm).

(BB1-BB1A-BB1D-245S-245SA-245SD) Main venturi, 1 in. (25.40 mm) I. D. Air bleed through venturi, to idle passage, .085 to .087 in. diameter (2.15 to 2.20 mm) drill.

(289S-289SD) Main venturi, 1-1/16 in. (26.99 mm) I. D. Air bleed through venturi, to idle passage, .0885 to .0905 in. diameter (2.25 to 2.30 mm) drill.

Float Setting: Top of float 1/32 in. to 1/16 in. (.79 to 1.59 mm) below top surface of lower body.

Vent: (To Float Chamber) Outside, Size: No. 30 (3.26 mm) drill.

Gasoline Intake Needle: Triangular, horizontal. No. 38 (2.58 mm) drill in needle seat, 25-44S. (No. 31 (3.048 mm) drill, 25-46S, used with vacuum tank or gravity feed only.)

Idle Jet Tube: Jet size, .0236 in. (.60 mm) drill.

Idle Ports: Lower port size: .062 to .064 in. (1.58 to 1.63 mm) diameter. Top of port located .005 to .009 in. (.13 to .23 mm) below lower edge of valve.

Upper port size: .053 to .057 in. (1.35 to 1.45 mm) diameter (for idle adjustment screw).

Set Idle Adjustment Screw: 1/4 to 1/4 turns open. For richer mixture, turn screw out. Do not idle engine below 300 r.p.m. or 6 miles per hour.

Main Metering Screw: Adjustable.

Nozzle: No. 33 (2.87 mm) drill.

Accelerating Jets:

2—.0394 in. (1.00 mm) drill 1/16 in. (1.59 mm) from shoulder.

1—.051 in. (1.3 mm) drill 3/8 in. (9.53 mm) from shoulder.

1—.063 in. (1.6 mm) drill 23/32 in. (18.26 mm) from shoulder.

1—.051 in. (1.3 mm) drill 1-1/16 in. (26.99 mm) from shoulder.

Air Bleed to Nozzle: (BB1-BB1A-BB1D-245S-245SA-245SD) Size: .0275 to .0295 in. (.70 to .75 mm) drill.

(289S-289SD) Size: .0384 to .0404 in. (1 mm) drill.

Step-up Jet: (Power Orifice) (BB1-BB1A-BB1D-245S-245SA-245SD) .0315 in. (.80 mm) drill.

(289S-289SD) .0354 in. (.90 mm) drill.

Accelerating Pump: Type, low pressure, delayed action.

Stroke: Summer setting (inner hole, short stroke) 9/16 in. (14.29 mm).

Stroke: Winter setting (outer hole, long stroke) 1 in. (25.40 mm).

Pump intake ball check: size 1/8 in. (3.18 mm).

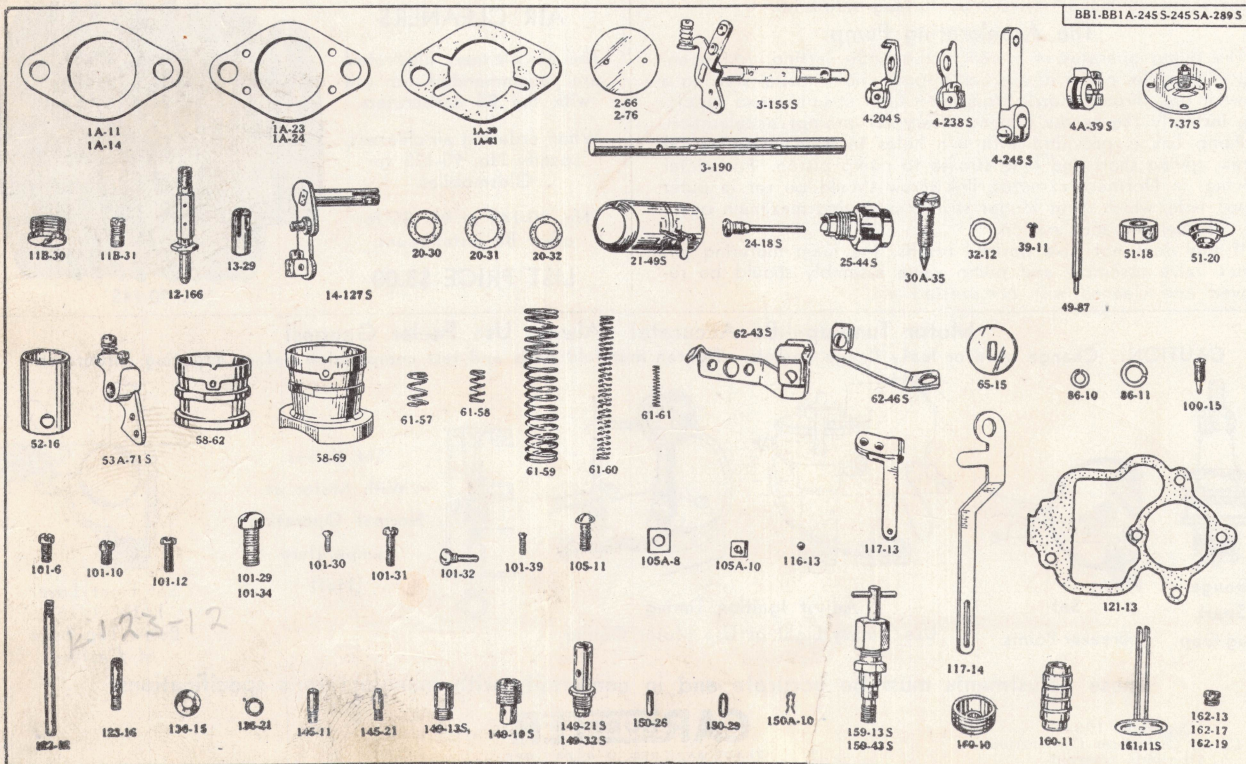
Pump discharge jet (in pump valve cage assembly) No. 52 (1.61 mm) drill size.

Choke: Butterfly type, with pressure relief, poppet, valve.

Tube Clamps: On air intake and under body attaching screw.

Throttle Lever: Adjusting—on left side. Loose lever on right side.

Note: Parts shown below are for identification only. Check number and price in list given on Page 3.



Models BBI, BBIA, BBID, 245S, 245SA and 245SD—List Price \$13.00

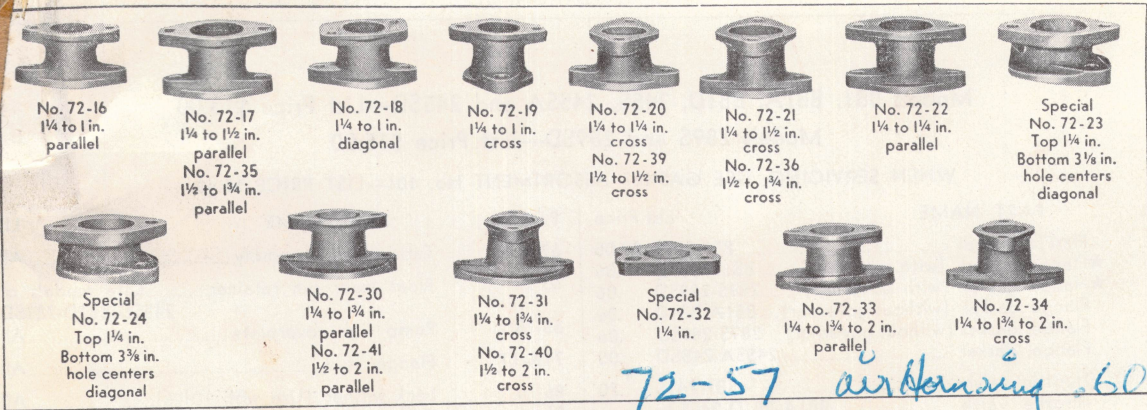
Models 289S and 289SD—List Price \$15.00

WHEN SERVICING, USE GASKET ASSORTMENT No. 101—LIST PRICE \$0.40

EFFECTIVE JANUARY 1, 1947, ADD 20% TO LIST PRICE OF CARBURETERS AND 5% TO ALL OTHER PRICES SHOWN WITH FRACTIONAL ADJUSTMENT TO NEAREST EVEN CENT.

Part No.	PART NAME	List Price	Part No.	PART NAME	List Price
1A-11	Flange gasket	BBI-245S \$0.05	62-46S	Tube clamp assembly	All .25
1A-23	★Flange gasket (with governor)	BBIA-BBID .06	63-24	Float lever pin retainer	Late models of 245SD-BBID-289SD All .05
1A-24	★Flange gasket (with governor)	289S-289SD .06	65-15	Pump link coverplate	All .02
1A-30	Flange gasket (without governor)	BBIA-BBID .06	71A-17	Flange stud	All .05
1A-31	Flange gasket (without governor)	289S-289SD .06	86-10	Lock washer (Use with 101-6)	All .01
1A-54	Flange gasket	245SA-245SD .05	86-11	Lock washer	All .01
2-66	Throttle valve	BBI-245S .20	86-15	Lock washer	All .01
2-76	Throttle valve	BBIA-BBID-245SA-245SD-289S-289SD .20	100-15	Collar screw	All .05
3-155S	Throttle shaft and lever assembly	BBI-245S .60	101-6	Choke bracket attaching screw (Sup. by 101-142S)	All .05
3-190	Throttle shaft	BBIA-BBID-245SA-245SD-289S-289SD .60	101-10	Wire clamp screw	All .05
4-204S	Throttle lever ass'y (loose)	BBI-245S .30	101-12	Choke tube bracket clamp screw	All .05
4-238S	Throttle lever ass'y (loose)	BBIA-BBID-245SA-245SD-289S-289SD .30	101-29	Body attaching screw	BBI-BBIA-245S-245SA-289S .05
4-245S	Throttle lever ass'y	BBIA-BBID-245SA-245SD-289S-289SD .60	101-30	Choke valve screw	All .05
4A-39S	Throttle shaft dog ass'y	BBIA-BBID-245SA-245SD-289S-289SD .30	101-31	Throttle lever adj. screw (Sup. by 101-58)	All .05
7-37S	Choke valve assembly	All .50	101-32	Pump link screw	All .05
11B-12	Rivet plug	BBI-BBIA-245S-245SA-289S .02	101-34	Throttle lever clamp screw	BBIA-BBID-245SA-245SD-289S-289SD .05
11B-26	Rivet plug	BBI-BBIA-245S-245SA-289S .02	101-39	Throttle valve screw	BBIA-BBID-245SA-245SD-289S-289SD .05
11B-30	Step-up piston plug	All .10	101-57	Body attaching screw	BBID-245SD-289SD .05
11B-31	Idle hole plug	All .10	101-58	Throttle lever adjusting screw	All .05
11B-33	Spark control passage plug	BBIA-BBID-245SA-245SD .10	101-142S	Choke bracket attaching screw and washer assembly	All .05
11B-41	Rivet plug	245SD-BBID-289SD .02	105-11	Tube clamp screw	All .05
11B-79	Rivet plug	245SD-BBID-289SD .02	105A-8	Tube clamp nut	All .05
12-166	‡Nozzle	All .60	105A-10	Choke tube clamp nut	All .05
13-29	Choke shaft (stub)	All .15	105A-13	Flange nut	All .05
14-127S	Choke assembly with clamp and screw	All .40	116-13	Ball	All .02
20-30	‡Nozzle gasket	All .05	117-13	Pump link	All .15
20-31	Needle seat gasket	All .05	117-14	Choke link	All .10
20-32	Metering screw gasket	All .05	121-13	Body gasket	BBI-BBIA-245S-245SA-289S .10
21-49S	Float and lever assembly	All .80	121-126	Body gasket	BBID-245SD-289SD .10
24-18S	Float lever pin and plug ass'y	245S-245SA-BBI-BBIA-289S and early models of 245SD-BBID-289SD .10	123-12	Idle passage tube	All .10
24-23	Float lever pin	Late models of 245SD-BBID-289SD .05	123-16	Idle orifice tube	All .20
25-44S	Needle and seat ass'y (For cars with fuel pump)	All .80	136-15	Choke link washer	All .02
25-46S	Needle and seat ass'y (For cars with vacuum tank or gravity feed)	All .80	136-21	Float lever pin plug washer	BBI-BBIA-245S-245SA-289S, early production of BBID-245SD-289SD .01
30A-35	Idle adjustment screw	All .30	145-11	Vent tube	BBI-BBIA-BBID-245S-245SA-245SD .05
32-12	Pump rod gasket	All .05	145-21	Vent tube	289S-289SD .05
39-11	Throttle valve screw	BBI-245S—2 for .05	149-13S	Check valve assembly	All .30
49-87	Step-up push rod	All .10	149-19S	Pump valve assembly	All .30
51-18	Throttle shaft collar	BBI-245S .15	149-21S	Step-up valve ass'y	BBI-BBIA-BBID-245S-245SA-245SD .40
51-20	Pump collar	All .10	149-32S	Step-up valve ass'y	289S-289SD .40
52-16	Pump sleeve	All .20	150-26	Pump collar pin	All .02
53A-71S	Pump arm ass'y	BBIA-BBID-245SA-245SD-289S-289SD .60	150-29	Venturi pin	All .02
58-62	Venturi	BBI-BBIA-BBID-245S-245SA-245SD .40	150A-10	Pin spring	All .01
58-69	Venturi	289S-289SD .50	159-13S	Adj. main metering screw and needle ass'y (Sup. by 159-43S)	BBI-BBIA-245S-245SA .75
61-57	Idle adjustment screw spring	All .05	159-43S	Adjustable main metering screw ass'y	All .75
61-58	Throttle lever adjusting screw spring	All .05	160-10	Pump piston	All .40
61-59	Pump spring	All .10	160-11	Step-up piston	All .20
61-60	Step-up piston spring	All .05	161-11S	Pump rod plate and rod assembly	All .30
61-61	Step-up spring	All .05	162-13	Power orifice	BBI-BBIA-BBID-245S-245SA-245SD .10
62-43S	Choke tube bracket assembly	All .25	162-17	†Power orifice	289S-289SD .10
			162-19	Power orifice	289S-289SD .10

‡When servicing 289S and 289SD carbureters, two nozzle gaskets No. 20-30 should be installed beneath nozzle No. 12-166.
 †This power orifice (1 mm) may be used when installations are made on motors originally equipped with 1 3/4 inch or larger units.
 ★This gasket to be installed between carburetor and governor when governor is installed. Original flange gasket to remain between governor and manifold.



CARTER FLANGE ADAPTORS—LIST PRICE \$1.00 EACH.

(SIZES GIVEN ARE STANDARD S. A. E. BOLT CENTERS)

These adaptors have been designed to make possible the installation of the Carter "BB1A," "245SA" and "289S" Carburetors on a number of cars. These adaptors all have carburetor end drilled with two 13/32" holes, spaced 2-11/16" center to center, to fit carburetor flange. Drillings of manifold ends of adaptors are shown below:

Adaptor	Manifold Flange Size	Manifold End Holes	Manifold Centers
72-16	1-inch S.A.E.	2 holes 5/16-inch—18 thread	2 3/8-inches
72-17	1 1/2-inch S.A.E.	2 holes 3/8-inch—16 thread	2-15/16-inches
72-18	1-inch S.A.E.	2 holes 11/32-inch No thread	2 3/8-inches
72-19	1-inch S.A.E.	2 holes 5/16-inch—18 thread	2 3/8-inches
72-20	1 1/4-inch S.A.E.	2 holes 3/8-inch—16 thread	2-11/16-inches
72-21	1 1/4-inch S.A.E.	2 holes 3/8-inch—16 thread	2-15/16-inches
72-22	1 1/4-inch S.A.E.	2 holes 13/32-inch—No thread	2-11/16-inches
*72-23	1 1/2-inch S.A.E.	2 holes 13/32-inch—No thread	3 1/8-inches
*72-24	1 1/2-inch S.A.E.	2 holes 13/32-inch—No thread	3 3/8-inches
72-30 & 72-31	1 1/4-inch S.A.E.	2 holes 7/16-inch—14 thread	3-5/16-inches
*72-32	1 1/2-inch S.A.E.	2 holes 11/32-inch—No thread	2-15/16-inches
72-33 & 72-34	1 1/4 or 2-inch S.A.E.	Not drilled	
72-35 & 72-36	1 1/4-inch S.A.E.	2 holes 7/16-inch—14 thread	3-5/16-inches
72-39	1 1/2-inch S.A.E.	2 holes 3/8-inch—16 thread	2-15/16-inches
72-40 & 72-41	2-inch S.A.E.	2 holes 7/16-inch—14 thread	3-9/16-inches
72-43	1 1/2-inch S.A.E.	2 holes 13/32-inch—No thread	2-15/16-inches
72-44	1 1/2-inch S.A.E.	2 holes 13/32-inch—No thread	2-15/16-inches

*Buick installations require B-19S Dash Choke Control Assembly and 92-11S Throttle Rod Assembly. List Price \$1.00 each.

*Note: This flange is supplied unless otherwise specified, with special throttle lever, control rod, etc., complete for \$2.20.

The installations listed below have been reported as entirely successful. Undoubtedly the "BB1" Carburetors will prove equally adaptable to many other motors of similar characteristics.

Car	Model	Year	Carburetor	Adaptor	Car	Model	Year	Carburetor	Adaptor
Auburn	6-43	1923-25	BB1-245SA	None	Graham	"Prosperity Six"	1931-32	BB1A-Special	72-22
Auburn	6-66	1926	BB1-245SA	None	Graham	Blue Streak	1932	†BB1A-Special	72-17
†Auburn	8-77	1927	BB1A-Special	None	Graham	"65"	1933	BB1A-Special	72-22
Auburn	6-80	1928-29	BB1A-Special	None	Hupmobile	A-6	1925-27	BB1-245SA	None
†Auburn	8-88	1925-27	BB1A-Special	None	Hupmobile	Eight	1927	BB1A-Special	72-20
Auburn	120	1928-29	BB1A-Special	None	Hupmobile	Six	1928-31	BB1A-Special	None
Auburn	DD6	1929	BB1A-Special	None	International				
Auburn "8"	8-100	1932	289	None	(I.H.C.)	Truck 646	1927-8-9	BB1A-Special	None
Buick	Standard Six		BB1A-Special	72-23	International	Jewett	1930-31	BB1A	None
Buick	Master Six		BB1A-Special	72-24	Jewett	644	1922-24	BB1A-Special	None
†Buick	8-50	1931	BB1A-Special	72-24	La Salle "8"	345C	1931	289	72-41
Chandler	31	1928	BB1-245SA	None	Marmon	L-Eight	1927	BB1A-Special	72-20
Chandler	65	1929	BB1-245SA	None	Marmon	68-78	1929	†BB1A-Special	72-20
Chrysler "4"	58	1925-26	BB1-245SA	None	Marmon	69 or Q	1930	†BB1A-Special	72-20
Chrysler	60-62	1927-28	BB1-245SA	None	Marmon	70	1931	†BB1A-Special	72-20
Chrysler	70	1928-27	BB1A-Special	72-20	Nash	Standard Six	1928-31	BB1A-Special	72-18
Chrysler	72-75	1927-29	BB1A-Special	72-20	Nash	8 Twin Ignition	1931	BB1A	72-24
Chrysler	65	1928-29	BB1A-Special	None	Oakland	Six "All Am."	1928	BB1A-Special	72-16
Chrysler	80 Imperial	1929	BB1A-Special	72-30	Oakland	Six	1929	BB1A-Special	72-22
Chrysler	66	1930	BB1A-Special	None	Oldsmobile	Six	1927-30	BB1-245SA	None
Chrysler	Six	1930	BB1-245SA	None	†Packard	Six	1926-28	BB1-289S	72-39
Chrysler	Six	1931	6B2 Chrysler	None	†Packard	Eight	1929	- BB1-289S	72-39
De Soto	Six "K"	1928-29	BB1-245SA	None	Packard "8"	900	1931-32	289	72-39
De Soto	Six "K"	1930	BB1-245SA	None	Paige	6-45		BB1A-Special	72-17
De Soto	Six "K"	1931	6B2	None	Pierce-Arrow	81	1928	289	None
Devaux	6-75	1931	BB1A-Special	72-22	Pontiac	Six	1926-7-8	BB1-245SA	None
Diamond T	Truck Model 290	1930	BB1A-Special	None	Pontiac	Six	1929-32	BB1A-Special	72-22
†Dodge	Senior Six	1928-30	BB1-289S	72-39	Reo	"Flying Cloud"	1929	BB1A-Special	72-21
Dodge	Victory Six	1927-28	BB1A-Special	72-20	Reo	"Mate"	1929	BB1A-Special	72-20
Dodge	Standard Six	1927-28	BB1A-Special	72-20	Reo	"Wolverine"	1927-28	BB1A-Special	72-20
Dodge	Six DA	1929	BB1A-Special	None	Reo	Mdls. "T" & "U"	1923-27	BB1A-Special	72-20
Dodge	Six DD	1930	BB1-245SA	None	Reo	Speed Wagon	1925-26	BB1A-Special	None
Dodge	Six DH	1931	6B2 Dodge	None	Reo	Truck "FA"	1927-28	BB1A-Special	72-20
Durand	6-14	1930-31	BB1A-Special	None	Reo	Trk. "DA"-"DC"	1927-28	BB1A-Special	72-20
Durand	6-70—6-75	1930	BB1A-Special	None	Roosevelt	"Eight"	1929	BB1A-Special	72-20
Erskine	6	1927-29	BB1-245SA	None	Studebaker	"Light 6"	1919	BB1A-Special	72-20
Erskine	"Dynamic"	1930	BB1A-Special	None	Studebaker	"Special Six"	1920-25	BB1A-Special	72-20
Essex	6	1930-31	BB1A-Special	72-32	Studebaker	"Standard Six"	1926-27	BB1A-Special	None
Falcon-Knight	All		BB1-245SA	None	†Studebaker	"Commander 6"	1927-29	BB1-289S	72-39
Flint	35-60-80	1924-26	BB1A-Special	72-20	Studebaker	"Dictator"	1928-30	BB1A-Special	72-20
Flint	A40-B40	1924-26	BB1-245SA	None	†Studebaker	"Commander 8"		BB1A-Special	72-20
Franklin	Six	1927-30	BB1A-Special	None	Studebaker	President 8	1931	BB1-289S	72-17
†Gardner	Eight	1928	BB1-289S	None	Whippet	"Fifty-five"	1932	BB1A-Special	None
Graham-Paige	6-10	1928	BB1A-Special	72-18	Whippet	Four	1928	BB1-245SA	None
Graham-Paige	6-19	1928	BB1A-Special	72-33	White Truck	Six	1929-30	BB1-289S	None
†Graham-Paige	16-14	1928	BB1-289S	None	Willys	Six	1930	BB1A-Special	72-16
Graham-Paige	6-12	1929	BB1A-Special	72-22	Willys-Knight	70-70A	1926-29	BB1-245SA	None
†Graham-Paige	6-15	1929	BB1-289S	None	Willys-Knight	70B	1926-29	BB1A-Special	72-16
(Necessary to drill out threads in 1 1/2" (38.10 mm) end of adaptor)					Willys-Knight	6-87	1930	BB1A-Special	72-16
Graham	8-37	1929	†BB1A-Special	72-30	Willys	"6-97"—"6-98D"	1931	BB1A-Special	72-22
Graham-Special		1930	BB1A-Special	72-22	Willys "8"	880-98D	1931	BB1A-Special	None
Graham-Paige	"Standard"	1930	BB1A-Special	72-22	Willys-Knight	"66A"—"66B"	1929-30	BB1A-Special	72-20

†For constant open throttle driving install power orifice No. 162-17.

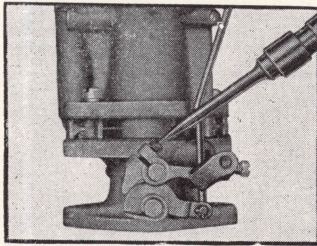
‡When installations are made on these cars install larger power orifice (step-up jet), No. 162-17.

EFFECTIVE JANUARY 1, 1947, ADD 20% TO LIST PRICE OF CARBURETTERS AND 5% TO ALL OTHER PRICES SHOWN WITH FRACTIONAL ADJUSTMENT TO NEAREST EVEN CENT.

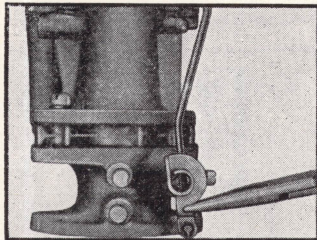
72-57 air demand 60

SERVICE PROCEDURE 1935 THRU 1938 — BB DOWNDRAFT CARBURETER

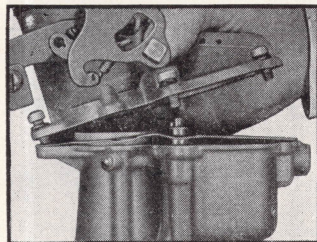
A fast, simple, Circuit method of servicing BB Downdraft Carbureters. Use Carter Tool Kit. BE ACCURATE.



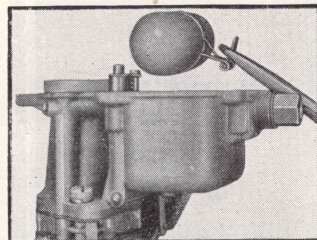
1. Remove throttle lever assembly.



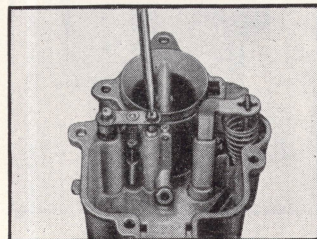
2. Remove throttle shaft dog and choke connector rod.
Disconnect rod at upper end.



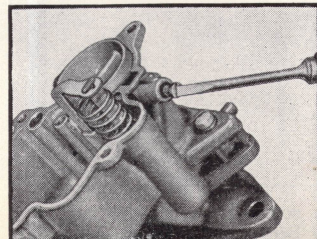
3. Remove air horn assembly.
Remove body gasket.



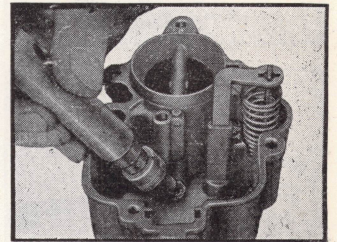
4. Remove float lever pin retainer, float and lever assembly, and pin.
Remove needle and seat assembly. If needle shows wear, replace both needle and seat.



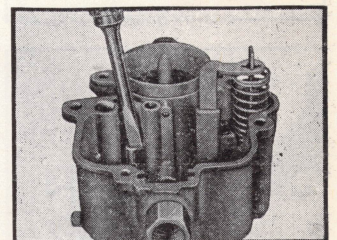
5. Remove idle orifice tube and plug assembly and attached parts.
Remove pin spring to detach from step-up piston and plate assembly. Remove step-up piston spring and gasket from step-up cylinder.



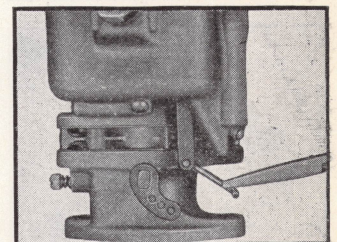
6. Remove pump jet assembly.



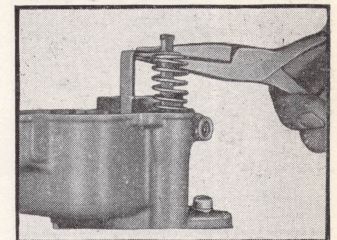
7. Remove main metering jet and gasket assembly.
Early 1935 and prior models used main metering screw beneath float bowl.



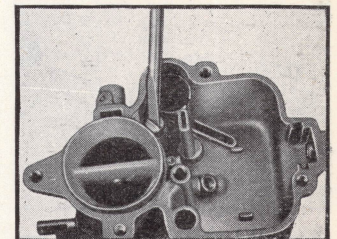
8. Remove step-up jet and gasket assembly.



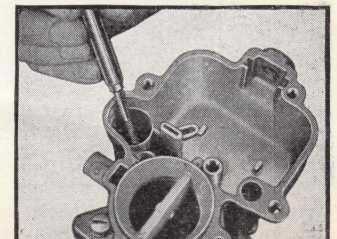
9. Disconnect pump connector link at both ends.
Check throttle shaft lever and pump connector link for wear.



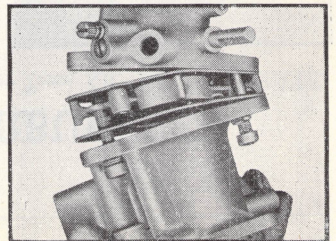
10. Remove entire pump assembly.
Disconnect pump operating link and spring from plunger assembly. Examine leather for wear or indication of leakage.



11. Remove pump check needle plug and needle.
Disregard this operation in 1936 and prior models.

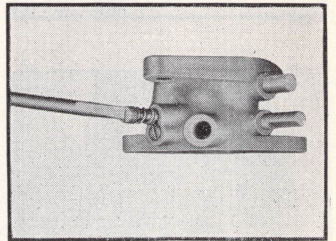


12. Remove pump retainer ring and ball at bottom of pump cylinder.
Use tool number T109-56 to remove retainer ring.

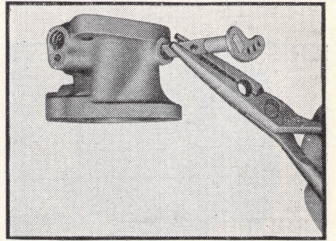


13. Remove body flange assembly and insulator from body.

(See note at bottom of page.)

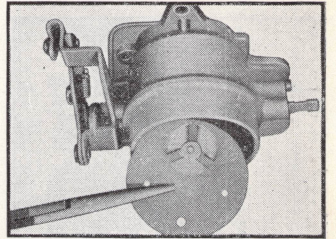


14. Remove idle adjustment screw and spring and idle port plug.

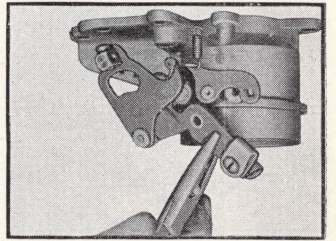


15. Remove throttle valve and throttle shaft and arm assembly.

Check for loose arm and wear on shaft.

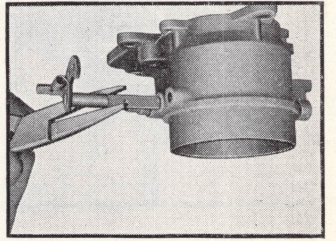


16. Remove choker valve assembly.



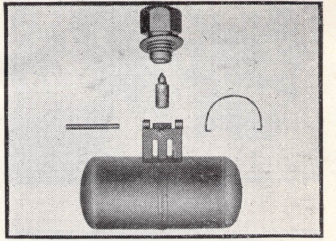
17. Remove choke tube bracket.

Disengage spring before removing to avoid injury to spring.

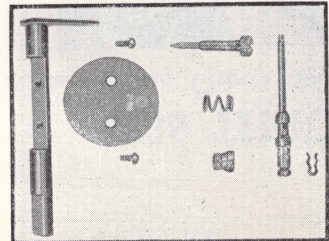


18. Remove choke control lever.

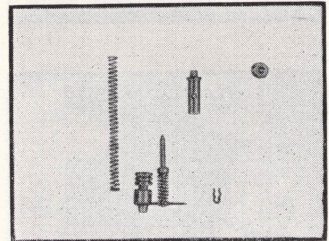
Clean castings and all parts thoroughly with clean gasoline.



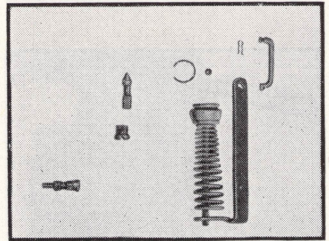
19. Group parts controlling gasoline level.



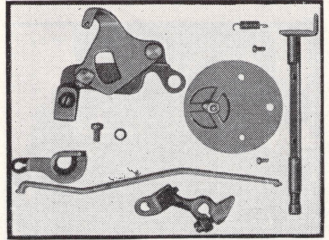
20. Group parts controlling idle.



21. Group parts controlling high speed circuit.

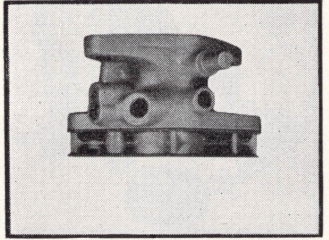


22. Group parts controlling pump circuit.



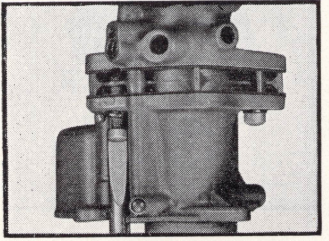
23. Group parts for choke circuit.

Examine each part in the five groups and replace any part that shows wear, or does not meet specifications.



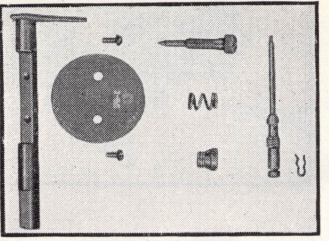
24. Place insulator and new flange gaskets on body flange.

Be sure that holes in casting, insulator and gaskets line up properly. 1933 models do not have insulator.



25. Set body in place, then tighten screws securely.

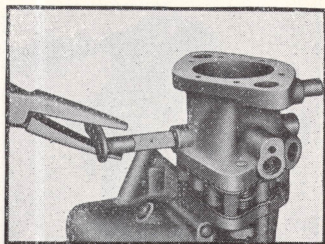
Don't forget to put lock washers on screws.



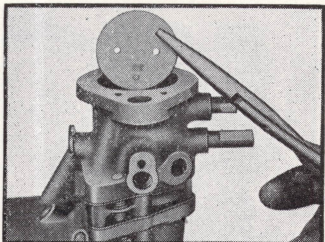
26. Assemble idle circuit parts as shown.

Use new throttle valve screws. Scrape all carbon from bore of flange casting.

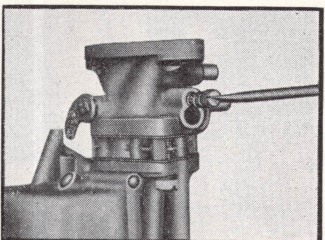
Note: In 1936 and prior models, vent tube assembly in diffuser bar in venturi should be removed with screwdriver and cleaned with air. In 1937 and 1938 models, vent tube can be serviced by removing rivet plug under bowl directly below main metering jet. Tool Number T109-70 must be used to remove tube and to install new tube. Never reuse old vent tube or plug.



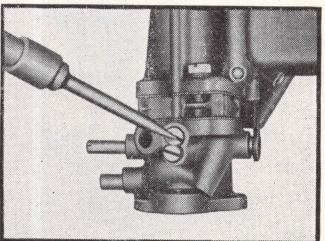
27.
Install throttle shaft and arm assembly.



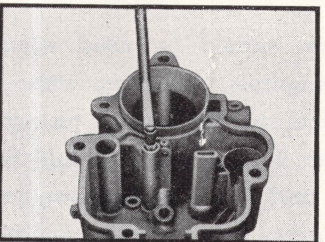
28.
Install throttle valve.
Small "c" in circle or part number should be toward idle port when viewing casting from manifold side. Center throttle valve by tapping lightly and hold in place with finger before tightening screws.



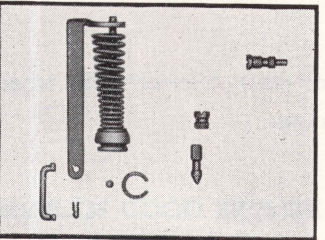
29.
Install idle adjustment screw and spring.
Back out from seated position to specifications.



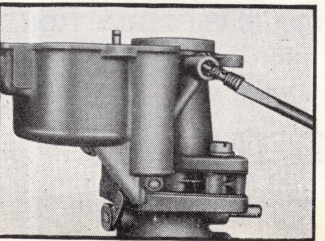
30.
Install idle port plug.
Late models have rivet which must be installed before idle adjustment screw and spring.



31.
Install idle orifice tube and plug assembly.
Assembly must seat well in casting.



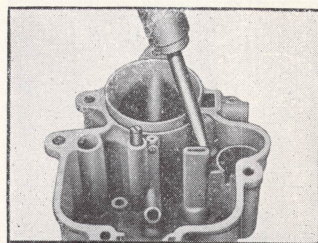
32.
Assemble parts for pump circuit.



33.
Install pump jet assembly.
Models prior to 1937 used separate pump jet and pump jet plug. Be sure jet is clear of all restrictions and seats properly.

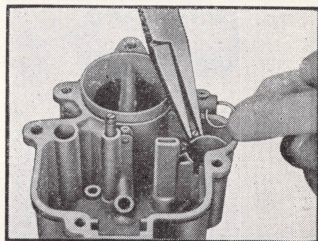
34.
Install pump check needle and plug.

Disregard this operation on models prior to 1937 as they do not have the needle and plug. 1938 models use ball and spring instead of needle.



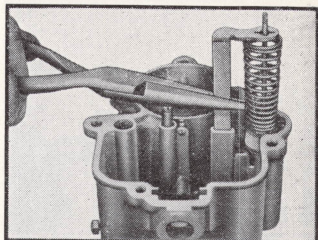
35.
Install ball and pump retainer ring in pump cylinder.

1935 and prior models used pump check needle seat instead of retainer ring.

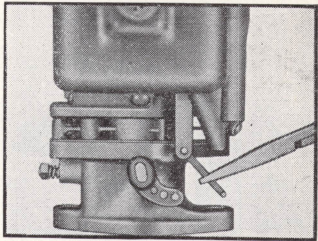


36.
Install complete pump plunger assembly as shown.

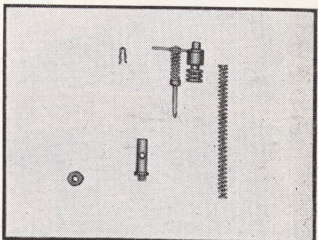
1936 and prior models used double piston pump arrangement which should be installed with casting inverted. Inner piston should operate freely.



37.
Install pump connector link.
Inner hole for short stroke, outer hole for long stroke.

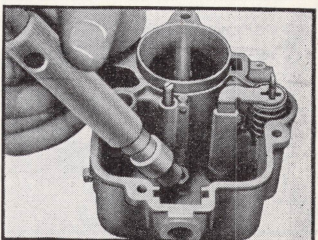


38.
Assemble parts controlling high speed circuit.
Check spring for damage.



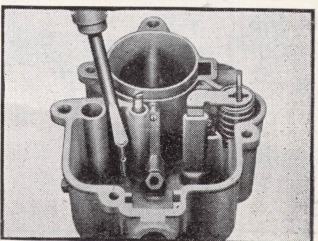
39.
Install main metering jet and gasket assembly.

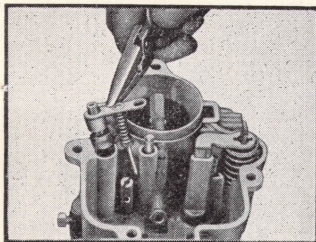
Early 1935 and prior models used main metering screw beneath float bowl.



40.
Install step-up jet and gasket assembly.

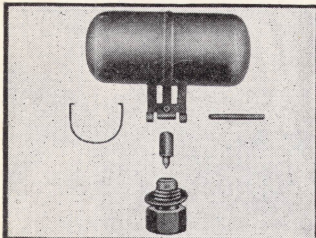
Early 1935 and prior models used step-up valve assembly.





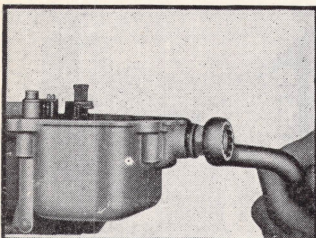
41.
Install step-up piston, gasket, spring, and step-up piston plate and rod assembly.

Early 1935 and prior models used step-up piston assembly in air horn (bowl cover) casting.

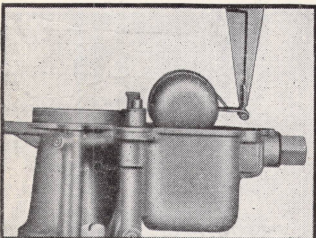


42.
Assemble parts controlling gasoline level as shown.

Check float for dents and wear on lip and float pin for wear. If needle shows groove on seating surface, replace both needle and seat.

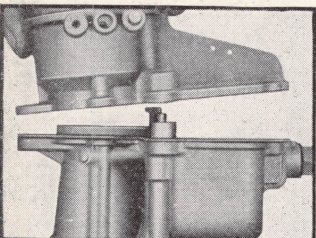


43.
Install needle seat and gasket assembly.

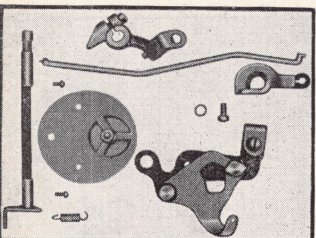


44.
Install needle, float pin, float and lever assembly, and retainer.

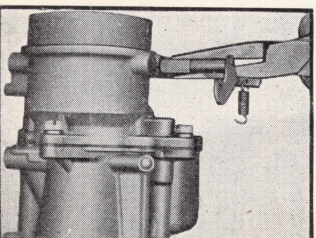
Set float level to specifications by bending lip, not float.



45.
Install air horn casting. Use new body gasket.

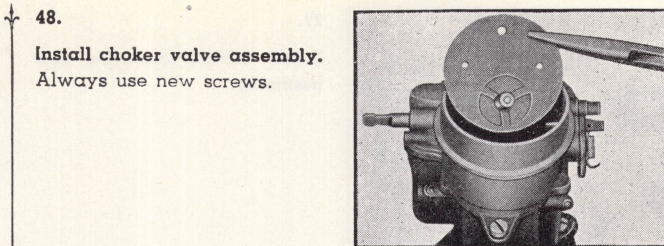


46.
Assemble parts for choke circuit.

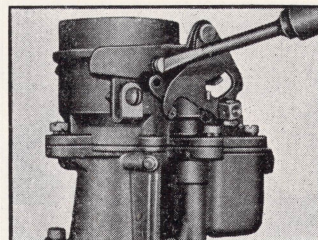


47.
Install choke control lever and shaft assembly.

Check for loose lever on shaft.

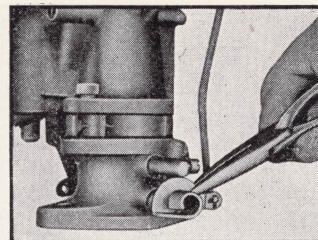


48.
Install choker valve assembly. Always use new screws.

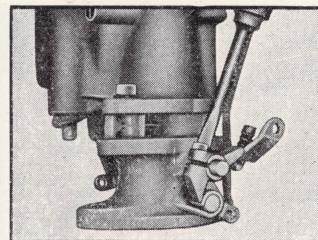


49.
Install choke tube bracket assembly.

Install spring.



50.
Install choker connector rod and throttle shaft dog.



51.
Install throttle lever assembly.

Tighten screw securely. Protect your work with a Carter Airdome Fuel Filter.

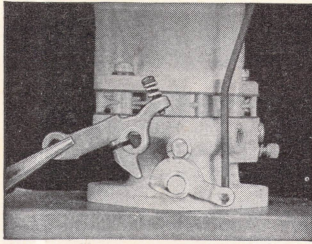
Note: New flange gasket should be used when installing carburetor on manifold. On cars without governor, gasket with 4 slots should be used; on cars with governor, gasket with 4 small holes should be used between carburetor and governor, the original gasket with 4 slots to remain on manifold beneath governor.

Always use complete new gasket assortment when servicing a Carter Carburetor.

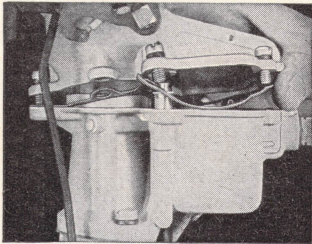
NO CARBURETOR CAN DELIVER GOOD MILEAGE OR PERFORMANCE UNLESS COMPRESSION IS NORMAL AND THE MOTOR IS PROPERLY TUNED.

SERVICE PROCEDURE 1939 AND LATER BB DOWNDRAFT CARBURETER

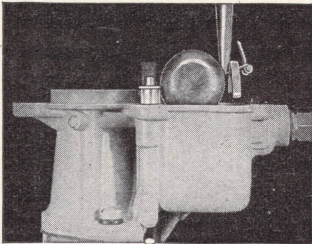
A fast, simple, Circuit method of servicing 1939 BB Downdraft Carbureters. Use Carter tool kit.
BE ACCURATE



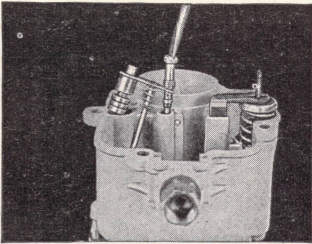
1.
Remove throttle lever assembly.



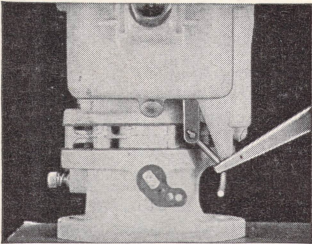
2.
Remove air horn assembly.
Remove body gasket.
Disconnect throttle connector rod at upper end.



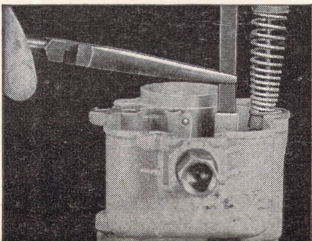
3.
Remove float and lever assembly, float pin and retainer.



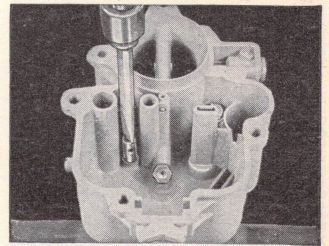
4.
Remove idle orifice tube and plug assembly, step-up piston plate and rod assembly.



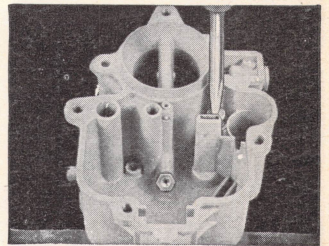
5.
Remove pump connector link.



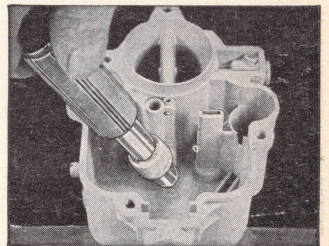
6.
Remove pump plunger and rod assembly, pump spring and pump operating link.



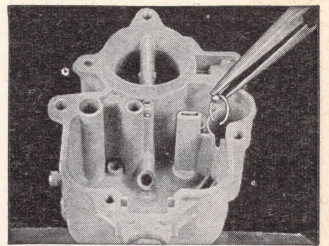
7.
Remove step-up jet and gasket assembly.



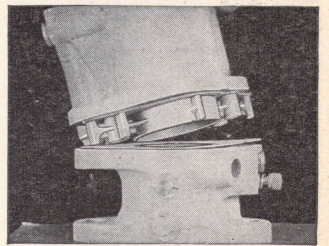
8.
Remove pump check plug and discharge check ball.



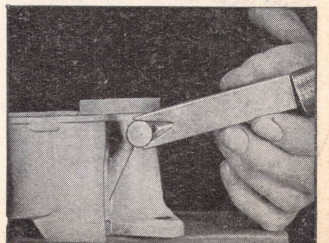
9.
Remove main metering jet and gasket assembly.



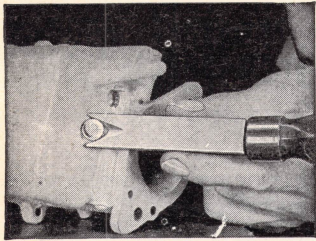
10.
Remove pump retainer ring and intake check ball.



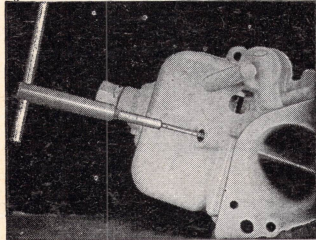
11.
Remove body flange assembly and insulator from body.



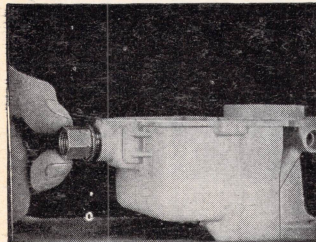
12.
Remove pump jet rivet plug and pump jet.



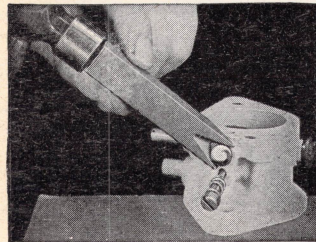
13.
Remove main vent tube rivet plug.



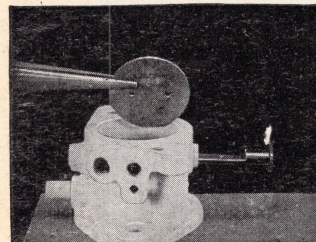
14.
Remove main vent tube.
Use tool T109-70.



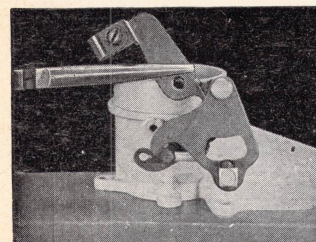
15.
Remove needle seat and gasket.



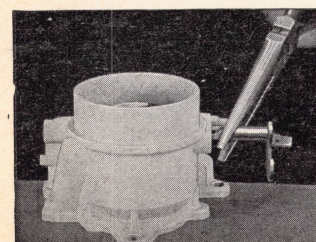
16.
Remove idle adjustment screw and spring, then idle port rivet plug.



17.
Remove throttle valve and throttle shaft and arm assembly.

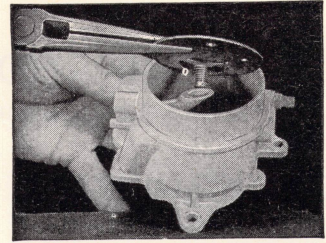


18.
Remove choke tube bracket assembly.



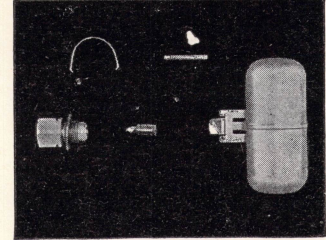
19.
Remove choke valve screws and choker shaft and lever assembly.
Check for loose arm on shaft and wear.

20.
Remove choker valve.
Clean castings and all parts thoroughly with clean gasoline. Scrape all carbon from bore of casting.

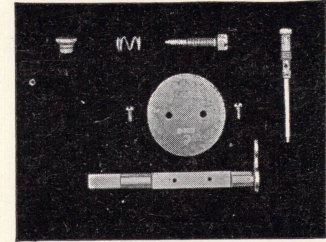


TO REASSEMBLE

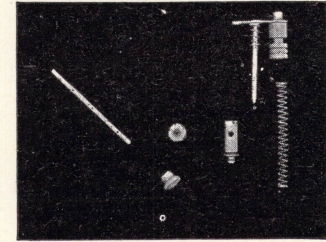
21.
Group parts controlling gasoline level.



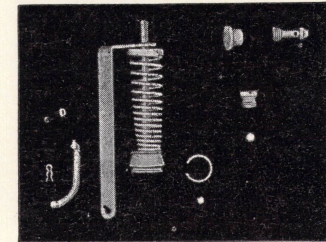
22.
Group parts controlling idle circuit.



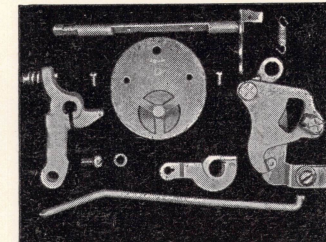
23.
Group parts controlling high speed circuit.



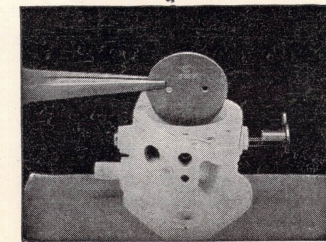
24.
Group parts controlling pump circuit.

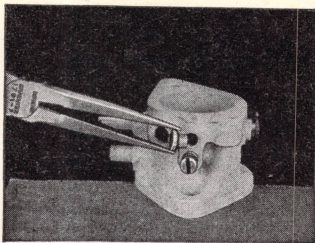


25.
Group parts controlling choke circuit.
Examine each part in the five groups and replace any part that shows wear, or does not meet specifications.



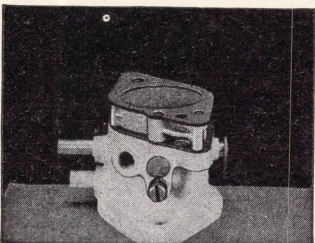
26.
With manifold side of flange down, install throttle shaft and arm assembly then throttle valve.
Small "c" in circle should be toward idle port, and facing down. Center valve by tapping lightly and hold in place before tightening screws. Use new screws.



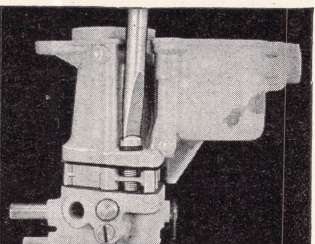


27.
Install new idle port rivet plug first, then install idle adjustment screw and spring.

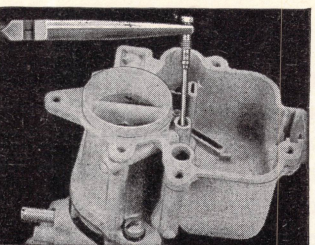
Back out from seated screw to specifications.



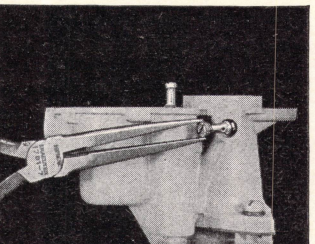
28.
Install insulator and gaskets. Use new gaskets. Be sure that holes in casting, insulator and gaskets line up properly.



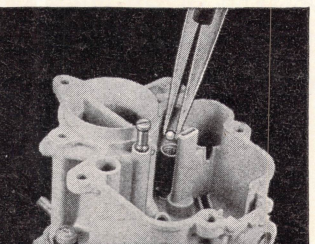
29.
Install body castings and securely tighten screws. Don't forget lock washers.



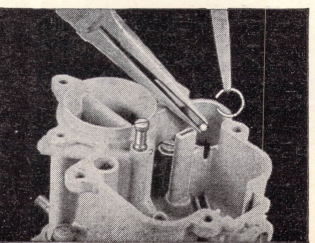
30.
Install idle orifice tube. Do not tighten—leave it loose.



31.
Install pump jet and pump jet rivet plug. Be sure jet is clear of all restrictions and seats properly.

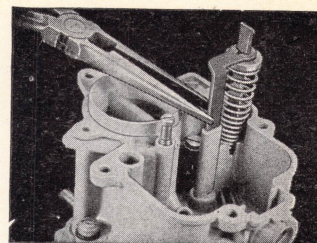


32.
Install pump discharge check ball and plug. Discharge ball is large ball. Be sure to put check balls in correct passages.

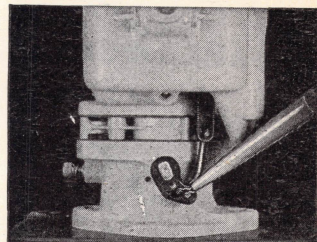


33.
Install pump intake check ball and pump retainer. Intake ball is small.

34.
Install pump plunger and rod assembly, pump spring and pump operating link.

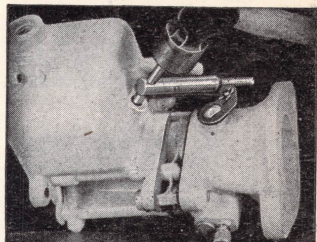


35.
Install pump connector link and pin spring. Connect in center hole.

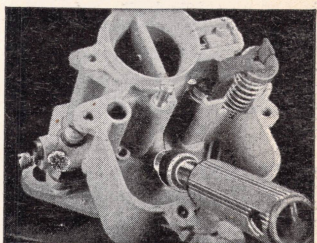


36.
Install main vent tube, then main vent tube rivet plug.

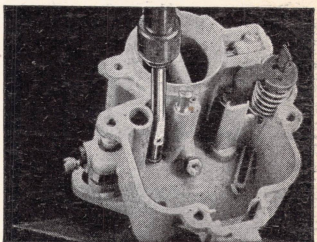
Tools T109-70 or T109-151 must be used to install new tube. (See "Adjustments" on catalog page.) Never reuse an old vent tube or plug.



37.
Install main metering jet and gasket assembly.

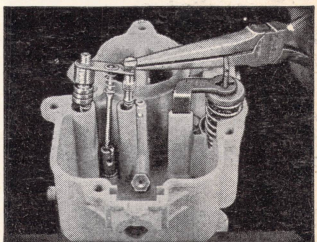


38.
Install step-up jet and gasket assembly.

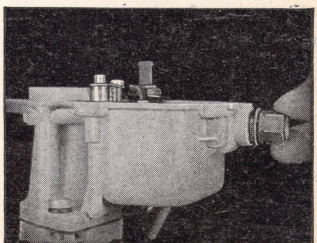


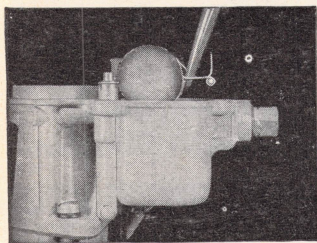
39.
Install step-up piston ring, gasket and step-up piston, plate and rod assembly. Securely tighten idle orifice tube.

Check springs for damage.



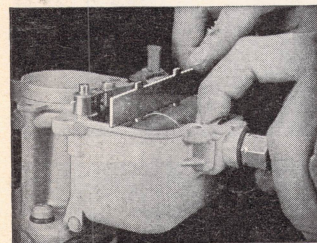
40.
Install needle seat and gasket. Then install needle. If needle or seat shows wear, replace both.



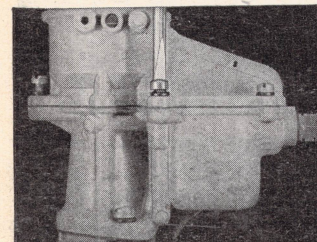


41.
Install float and lever assembly, float pin and float lever pin retainer.

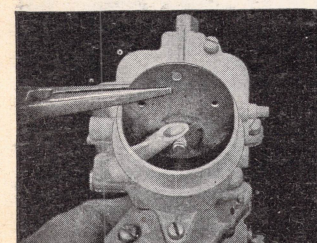
Check float for dents and for wear on float lip or float pin.



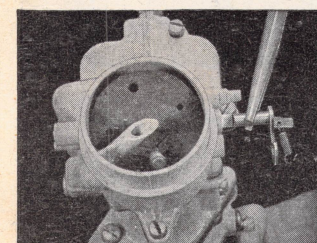
42.
Set float level.
Set float level to specifications. Bend lip, not float.



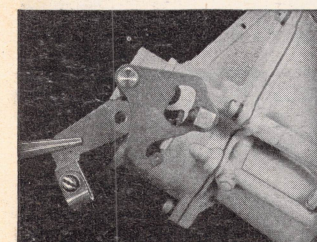
43.
Install air horn assembly.
Use new gasket.



44.
Install choke valve.
Use new screws. Center valve by tapping lightly before tightening screws.



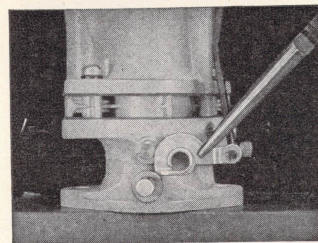
45.
Install choker shaft and lever assembly with spring attached.
Check for loose lever on shaft.



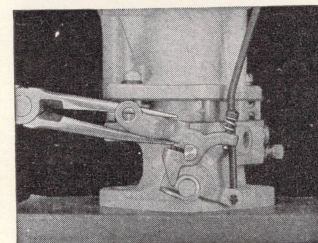
46.
Install choke bracket assembly.
Attach spring.

47.
Install choker connector rod and throttle shaft dog. Place dog on cast iron shaft.

Check rod and dog for wear.



48.
Install throttle lever assembly.
Tighten screws securely. Protect your work with a Carter Airdome or Ceramic Filter.



Note: New flange gasket should be used when installing carburetor on manifold. On cars without governor, gasket with 4 slots should be used; on cars with governor, gasket with 4 small holes should be used between carburetor and governor, the original gasket with 4 slots to remain on manifold beneath governor.

Always use complete new gasket assortment when servicing a Carter Carburetor.

NO CARBURETOR CAN DELIVER GOOD MILEAGE OR PERFORMANCE UNLESS COMPRESSION IS NORMAL AND THE MOTOR IS PROPERLY TUNED.

CARBURETOR
TRADE MARK REG. U. S. PAT. OFF.
MARCA REGISTRADA