BENDIX STROMBERG CARBURETOR

SERIES WW

SERVICE AND ADJUSTMENTS

INCLUDES 1955 STUDEBAKER INFORMATION
(Supersedes Issue Dated Sept., 1953)

The following service and adjustment procedures cover the disassembly, cleaning, inspection, reassembly and adjustments of the Stromberg Series "WW" Carburetor.

DISASSEMBLY

Disassembly consists of separating the carburetor into its three basic groups, namely: the Air Horn, the Main Body, the Throttle Body, and also the disassembly of each of these groups.

Note: The throttle valves in open position extend beyond the throttle flange and therefore, care should be exercised to avoid damaging the valves.

Remove the cotter pins from the pump piston link and pump rod. Remove rod and washers.

Remove pump fulcrum screw (L.H. thread), spring washer and pump lever.

Invert carburetor and remove four throttle body attaching screws and throttle body assembly with gasket from main body.

Remove air horn attaching screws and lift off air horn assembly and gasket. Remove pump lower spring from main body if detached from piston.

AIR HORN

Remove accelerating pump and air horn gasket. Remove pump felt, washer and spring from pump link.

Remove vacuum power piston by using block of wood as a fulcrum and a small open end wrench for a lever. Pry lightly with wrench to remove piston.

On models with automatic choke control—remove thermostat cover screws and lug washers, thermostat cover assembly and gaskets. Then remove nut, lockwasher and crank lever from end of choke shaft (use Tool T-25047). Remove vacuum piston.

All models—scribe choke valve along both sides of choke shaft and remove screws, choke valve and choke shaft.

Remove lead ball plugs.

MAIN BODY

Remove the idle tubes.

Remove pump discharge nozzle attaching screw, nozzle and gaskets. Turn main body over and catch check ball.

Remove fuel inlet screen retainer clip (use Tool T-25360), inlet screen, float needle valve, seat and gasket. Then remove fulcrum pin clip, float and fulcrum pin (place hand over clip when removing).

Remove power by-pass jet and gasket.

Remove accelerating pump check ball and strainer screen retainer clips, then the check ball and strainer screen (use Tool T-25360).

Invert main body, remove main metering jet plugs and gaskets (use Tool T-19099), main metering jets (use Tool T-24924) and then remove main discharge jets (use Tool T-24967).

Remove lead ball and drive plugs.

THROTTLE BODY

Scribe throttle valves along both sides of throttle shaft. Mark valves and throttle body to assure reassembly in same barrel. Then remove screws, throttle valves and throttle shaft.

Remove idle needle valves and springs.

CLEANING AND INSPECTION

Thoroughly clean all metal parts in **Bendix Metalclene,** blow out all tubes and channels with air pressure. Inspect housings for damage, excessive wear, burrs or warpage. DO NOT CLEAN NON-METALLIC PARTS in Bendix Metalclene. Always use a complete Repair Kit when overhauling a Stromberg Carburetor.

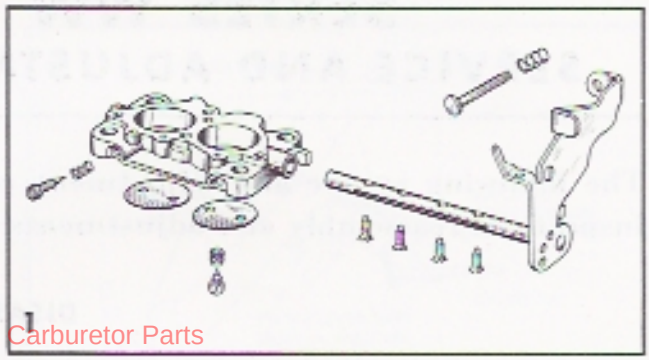
Using the code number stamped on the air horn cover, adjacent to the fuel inlet, refer to the Bendix Stromberg Parts Catalog, 10-D, for the correct Stromberg Repair Kit and complete list of service parts.

1 THROTTLE BODY

Insert throttle shaft in throttle body and assemble throttle valves in same barrel from which valves were removed, leaving screws loose.

Close throttle, align valves for best closing and securely tighten screws.

Replace idle needle valves and springs: Turn each needle valve in lightly against its seat, then back out each valve one full turn.



2 MAIN BODY

Replace drive plugs and lead ball plugs.

Assemble main discharge jets (1) (use Tool T-24967). Then assemble main metering jets (2) (use Tool T-24924). Replace gaskets and main jet plugs (use Tool T-19099). Tighten plugs securely.

Assemble power by-pass jet (3) and gasket.

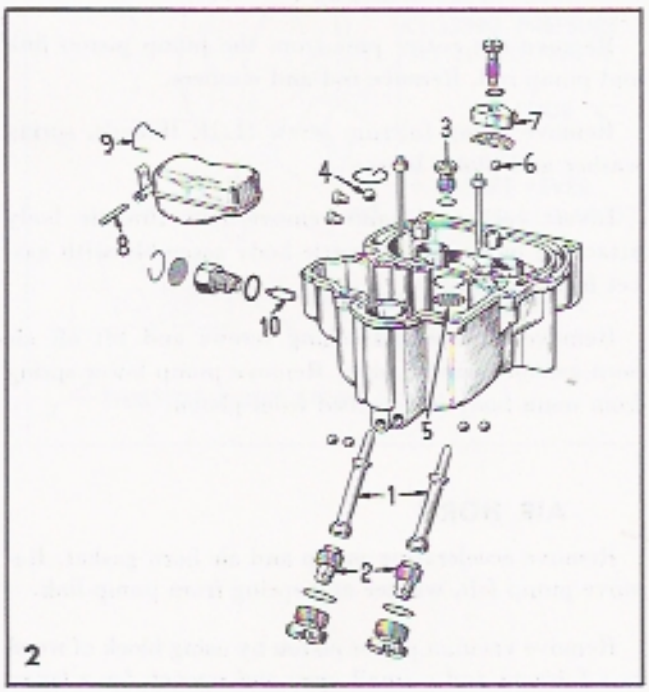
Place pump inlet check valve ball (4) in center channel of pump cylinder (use Tool T-25568 to position retainer clip). Place retainer clip in sleeve of tool. Hold end of sleeve against flat surface. Insert plunger in sleeve and press down against clip. Place sleeve in the pump cylinder so clip straddles both channels and hold firmly. Insert plunger against clip. Hold plunger and raise sleeve. Remove tool and make certain clip is in proper position. Assemble pump inlet screen (5) and retainer clip (use Tool T-25360).

Insert pump discharge check ball (6) in center passage and assemble gasket, discharge nozzle (7), attaching screw and gasket.

Assemble idle tubes.

Insert fulcrum pin (8) in float lever and place float in body. Place fulcrum pin clip (9) ends against ledges in float chamber and press loop securely under boss.

Assemble float needle valve (10), seat and gasket. Securely tighten seat. Place fuel inlet strainer screen in needle valve seat and install screen retainer clip (use Tool T-25360).



3 Check float level. Correct float level setting is 3/16" from top of main body to top of float measured at center of float with float lip held firmly against needle valve. Use depth gauge or Tool T-25569 to measure float level. To reset float level, bend float lever next to float (use Tool T-24733).

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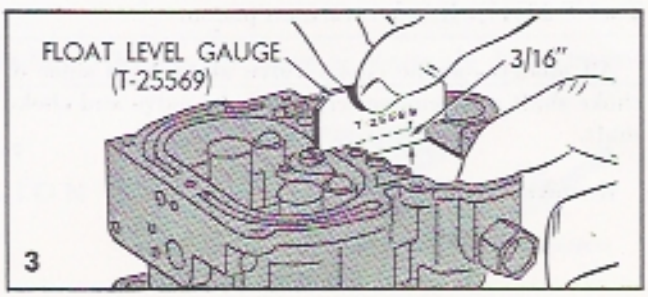

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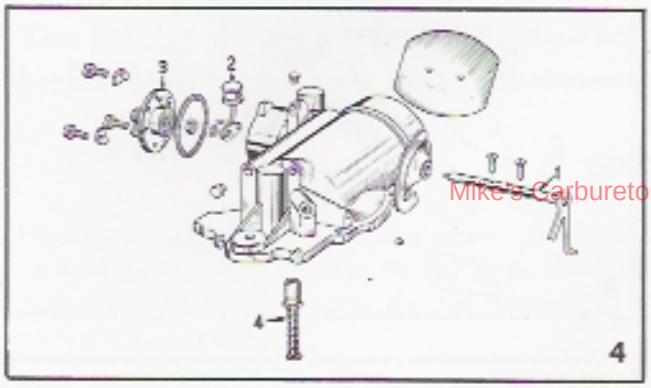

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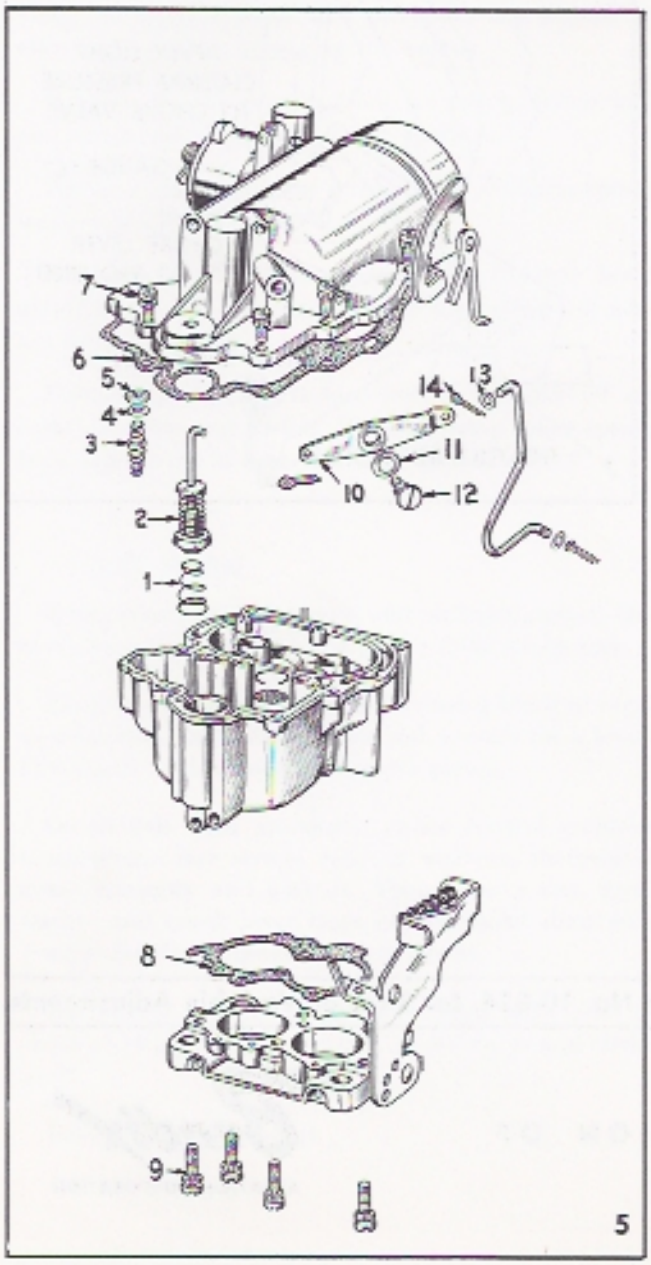

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4 AIR HORN

Replace lead ball plugs in air horn.

Insert choke shaft (1) in air horn. Assemble choke valve, leaving screws loose. Close choke and align valve for best closing. Tighten screws securely.

On models with automatic choke control—Assemble vacuum choke piston (2) in choke housing and attach crank lever to choke shaft with lockwasher and nut. Tighten nut (use Tool T-25047). DO NOT USE ANY FORM OF LUBRICANT ON PISTON OR IN CYLINDER.

Place gasket on choke housing and position thermostat cover assembly (3) with hook at the top. Replace attaching screws and lug washers but do not tighten. Rotate thermostat cover counter-clockwise, the direction indicated by arrow showing rich adjustment, until inverted "A" mark on thermostat cover lines up with raised projection on housing. Tighten screws uniformly.

Note: The correct thermostat and cover assembly has the figure "29" stamped on the outside surface. Do not use a part stamped with any other number.

On all models—Install vaccum power piston (4) in air horn, stake in place.

5 THREE BASIC GROUPS

Place small diameter end of pump spring (1) on end of pump piston (2). Assemble pump piston assembly into main body making certain that leather does not have any crease and bears evenly on complete circumference. Assemble spring (3), washer (4) and felt (5) on pump link.

Place air horn gasket (6) on main body.

Tilt air horn to assemble pump link and position air horn on main body. Press pump piston down and release to make certain piston is free to return.

Assemble air horn attaching screws (7).

Note: On carburetor with manual choke, attach choke tube holder to air horn flange on same side as choke lever.

Invert carburetor, place main body gasket (8) on main body. Place throttle body on gasket and assemble four throttle body attaching screws (9) securely.

Attach pump piston link to pump lever (10) with cotter pin. Then attach pump lever to air horn with spring washer (11) and fulcrum screw (12) (L.H. thread).

Assemble pump rod to center hole of throttle lever and to pump lever using flat washer (13) and cotter pin (14) at both ends of pump rod.

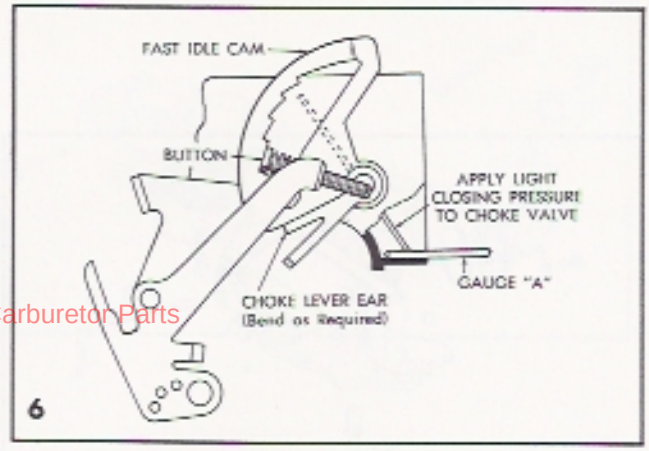
(Continued on page 4)

The following adjustments (6 and 7) apply only to carburetors with automatic choke.

6 FAST IDLE (SETTING "A") *

With button of slow idle adjusting screw resting on high step of fast idle cam, as shown, and light closing pressure applied to the choke valve, in this position the choke valve should be open sufficiently to insert drill gauge "A"* between the choke valve and wall of the air horn.

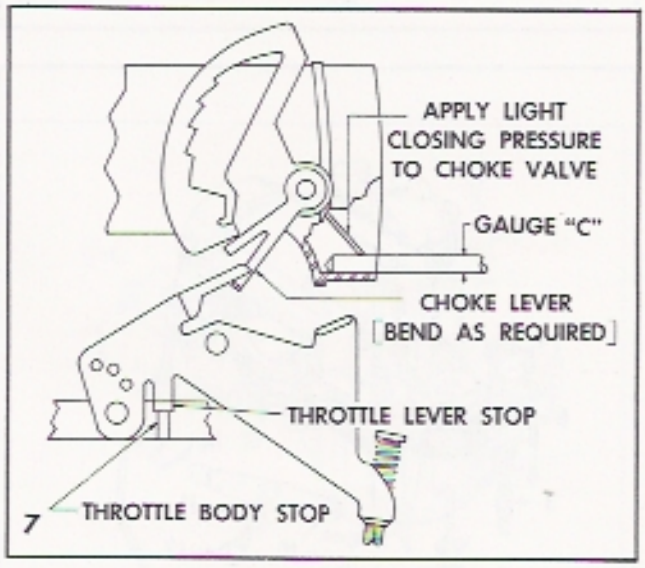
When choke valve opening is not as specified, bend ear on choke lever "up" or "down" as required.



7 WIDE OPEN KICK (SETTING "C") *

To check the wide open kick setting apply light closing pressure to the choke valve and then open throttle to wide open position with throttle lever stop resting against throttle body stop. In this position the choke valve opening should be sufficient to insert drill gauge "C"* between the choke valve and the wall of the air horn.

If the choke valve opening is not as specified, bend ear on choke lever as required to provide correct opening.



*Refer to Stromberg Carburetor Specifications, Form No. 10-824, for Sizes or Variable Adjustments.

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