STROMBERG SF-2 CARBURETOR

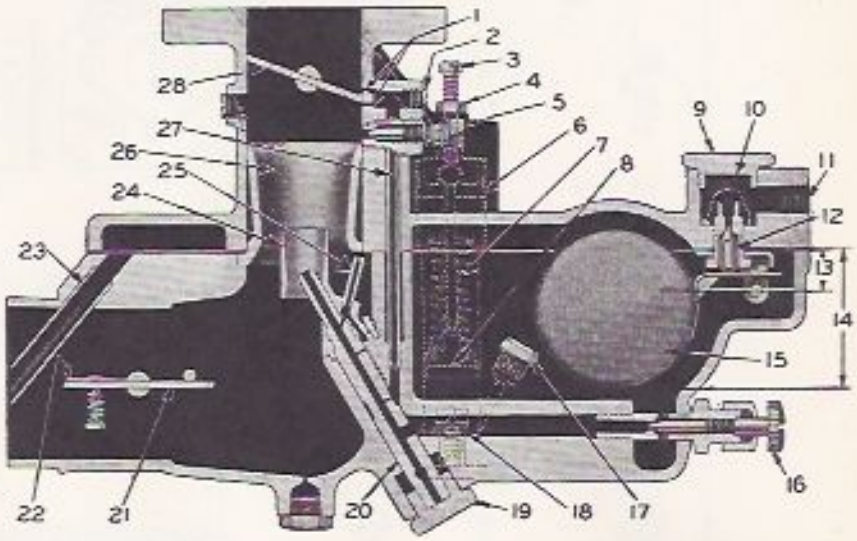
FOR STROMBERG NUMBER, CODE NUMBER, MANUFACTURER'S SYMBOL NUMBER, MODEL, BORE AND STROKE INFORMATION SEE PARTS PAGE

SIZE: 1-1/4" UPDRAFT S.A.E. 2-11/16" FLANGE CENTER

G.M.T.C. and Yellow Coach

PARTS ILLUSTRATED

1. Idle Discharge Holes
2. Idle Discharge Plug
3. Pump Adjustment Screw
4. Pump Adjustment Lock Screw
5. Idle Needle Valve
6. Vacuum Piston
7. Accelerating Pump Spring
8. Accelerating Pump Piston
9. Strainer Plug
10. Strainer
11. Gasoline Inlet
12. Float Needle Valve and Seat
13. Fuel Level (see instructions)
14. Float Setting (see instructions)
15. Float
16. Adjustable Metering Jet
17. Check Valve
18. Combination Power and Pump By-Pass Jet
19. Main Discharge Jet Nut
20. Main Discharge Jet
21. Choke Valve
22. Choke Poppet Valve
23. Vent Tube
24. Small Venturi
25. High Speed Bleed
26. Large Venturi
27. Idle Tube
28. Throttle Valve



Main Metering System—

The main metering system controls the flow of the fuel during the intermediate speed of the engine. Fuel enters the carburetor through the gasoline inlet (11) into the float chamber. From here the gasoline passes through the metering jet (16) which controls the supply of fuel for the main metering system, to the main discharge jet (20). The main discharge jet delivers the fuel to the small venturi (24) (auxiliary venturi) where it is mixed with air and flows into the carburetor barrel. The amount of air used in the mixture is controlled by the large venturi (26). (When replacing main discharge jet use new P-21372 gasket.)

Power System—

For maximum power or higher speeds a richer mixture is needed. This is accomplished by the power system. During the intermediate speed of the engine sufficient fuel is furnished by the main metering jet. However for hard pulls and wide open throttle this supply is not equivalent to the engine demands; therefore another valve comes into operation to supply this extra amount of gasoline needed. While the engine runs at a moderate speed a certain amount of manifold vacuum is created. This vacuum holds vacuum piston (6) in an up position but when the throttle is opened above normal to compensate for the extra power that may be needed from the engine the vacuum falls off accordingly and the vacuum piston drops until the pump piston (8), which is directly connected to the vacuum piston, comes in contact with and opens the valve in the by-pass jet (18). The opening of this valve allows an additional amount of gasoline to enter the main discharge jet and enrichens the mixture. This is known as the Power System.

Accelerating System—

As explained above, the vacuum piston of the pump is held in an up position by the manifold vacuum created by the engine. On sudden opening of the throttle the vacuum drops off very rapidly and the vacuum piston (6) is released. When this occurs accelerating pump spring (7) forces pump piston (8) down which in turn forces a discharge of gasoline to be driven through the by-pass jet (18) and out the main discharge jet. This sudden surplus of fuel enrichens the mixture for the moment and furnishes the engine the extra power needed for fast acceleration. The amount of discharge can be controlled by the adjustment screw (3). Turn screw IN to lessen, OUT to make greater.

Idle System—

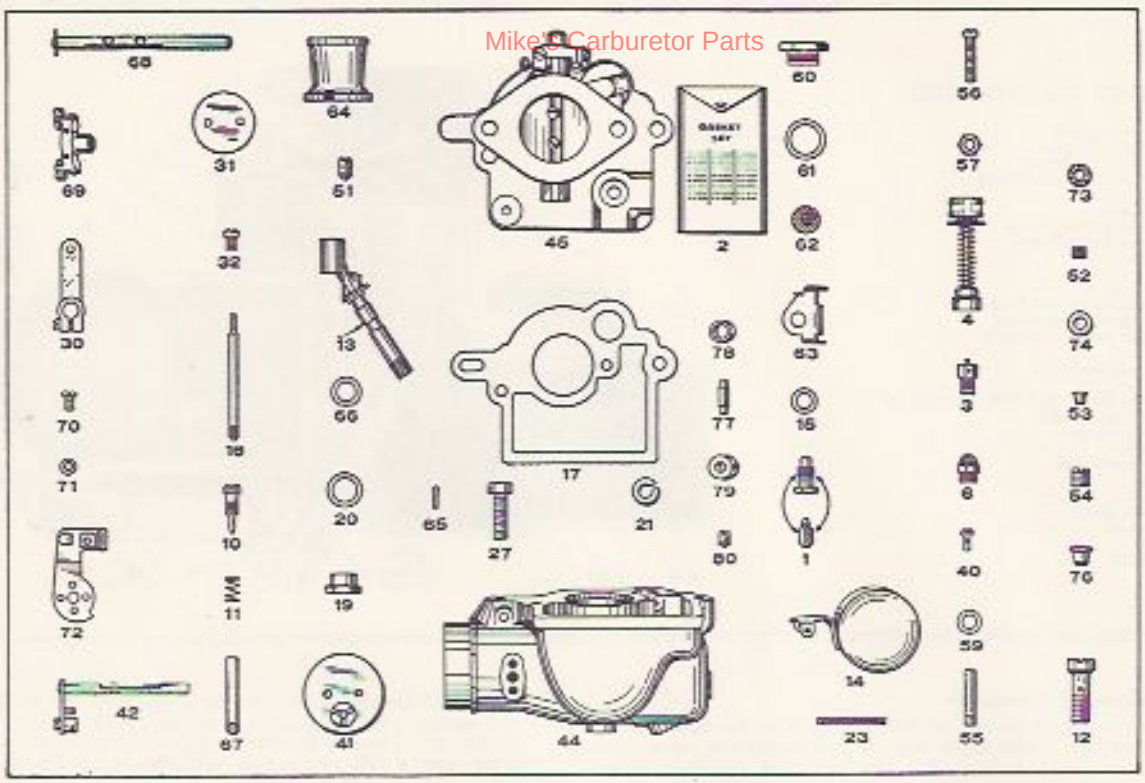
When the throttle valve is closed gasoline is delivered to the engine by means of the idle system of the carburetor. Gasoline is taken up through the idle tube (27) which meters the quantity of fuel for the idle system. It is mixed with air, the amount of which is governed by the idle needle valve (5) and reaches the engine by means of the idle holes (1) and up through the barrel of the carburetor. To make the mixture richer turn idle needle valve (5) **IN**, to make mixture leaner screw **OUT.**

Fuel Level—

The gasoline level in the float chamber is properly set at the factory and should not be adjusted unless carburetor has been handled roughly or level has been changed for some other cause. For measuring fuel level it is advisable to use an open vessel with a leveled top, large enough to support the throttle valve body and to accommodate the float assembly. Place main body gasket between body and vessel before checking. Connect gas line to inlet in throttle body and allow gas to feed into measuring vessel at the fuel pump pressure until flow is stopped by the closing of the float needle valve. Fuel level should measure (see parts page) below top surface of vessel (without gasket). Use standard depth gauge for measuring fuel level. To correct fuel level hold throttle body in inverted position and set float to measure (see parts page) from top of float (14) to gasket surface of throttle body, which will give approximate fuel level.

MOTOR TUNE-UP DATA

Due to the number of carburetor specifications for different engines listed herein it is impossible to give standard motor tune-up information.



SERVICE REPLACEMENT PARTS LIST

Key No.	Part Name
1	Float Needle Valve and Seat (NOT VAR.)
2	Complete Set of Gaskets
3	By-Pass Jet (VAR.)
4	Pump Piston Link and Spring
6	Pump Inlet Check Valve
10	Idle Needle Valve
11	Spring—Idle Needle Valve
12	Metering Jet (VAR.)
13	Main Discharge Jet (VAR.)
14	Float
15	Gasket—Float Needle Valve Seat
17	Gasket—Main Body
18	Idle Tube
19	Nut—Main Discharge Jet
20	Gasket—Main Discharge Jet Nut
21	Lockwasher—Main Body Attach.
23	Fulcrum Pin—Float
27	Screw—Main Body Attach.
30	Throttle Lever
	Screw—Throttle Lever Clamp
31	Throttle Valve
32	Screw—Throttle Valve Attach.
40	Screw—Choke Valve Attach.
41	Choke Valve
42	Choke Stem
44	Main Body
48	Throttle Body (complete with idle holes, throttle valve and stem) (VAR.)
51	Set Screw—Vent Tube
52	Plug—Vacuum Suction Channel
53	Plug—Pump Channel
54	Plug—Idle Discharge Channel
55	High Speed Bleeder (VAR.)

Key No.	Part Name
56	Screw—Pump Adj.
57	Nut—Pump Adj. Screw
59	Gasket—Metering Jet
60	Plug—Strainer
61	Gasket—Strainer Plug
62	Strainer—Gas
63	Hanger—Float
64	Venturi (VAR.)
66	Pin—Main Discharge Jet Locating
66	Gasket—Main Discharge Jet
67	Vent Tube
68	Throttle Stem
69	Throttle Stop
	Screw—Idle Adj.
	Spring—Idle Adj. Screw
70	Screw—Choke Tube Holder Attach.
71	Lockwasher—Choke Tube Holder Attach. Screw
72	Choke Tube Holder
	Screw—Choke Tube Clamp
	Nut—Choke Tube Clamp Screw
73	Washer—Idle Tube Cork
74	Washer—Idle Tube
*75	Plug—Gov. Conn.
76	Plug—Idle Drilling Hole
77	Pin—Choke Stem
78	Bushing—Choke Lever Spacer
79	Collar—Choke Stem
80	Set Screw—Choke Stem Collar
*81	Screw—Gov. Adj.
*82	Spring—Gov. Adj. Screw

*Parts Not Illustrated.

BENDIX PRODUCTS DIVISION
SOUTH BEND OF BENDIX AVIATION CORPORATION INDIANA

Printed in U. S. A.

STROMBERG CARBURETOR

Key No.	A-17902 G.M.T.C. 1934 Model T-73 Code No. 23-17A Symbol No. 052904 3-7/16" x 4-5/8"— 6 cyl.—Own 257	A-18612 Yellow Coach Model 257 Code No. 23-49A Symbol No. 069811	A-18622 Yellow Coach Model 239 Code No. 23-54A Symbol No. 069827	A-18632 Yellow Coach Model 286 Code No. 23-55A Symbol No. 069828 3-5/8" x 4-5/8"— 6 cyl.	A-18992 Yellow Coach Model 278 Code No. 23-68 Sym.No.2071293 3-5/8" x 4-1/2"— 6 cyl.	A-19012 Yellow Coach Model 308 Code No. 23-69 SymbolNo.2071294 3-13/16" x 4-1/2"
1	P-17282	P-17282	P-17282	P-17282	P-17282	P-17282
2	J-4436-G	J-4436-G	J-4436-G	J-4436-G	J-4436-G	J-4436-G
3	P-16786—.036"	P-16786—.036"	P-16786—.036"	P-16786—.032"	P-16786—.032"	P-16785—.032"
4	P-23133	P-23133	P-23133	P-23133	P-23133	P-23133
6	P-23135	P-23135	P-23135	P-23135	P-23135	P-23135
10	P-15396	P-15396	P-15396	P-15396	P-15396	P-15396
11	P-12530	P-12530	P-12530	P-12530	P-12530	P-12530
12	P-15384—.054"	P-15384—.054"	P-15384—.054"	P-15384—.054"	P-15384—.054"	P-15384—.068"
13	P-16773—No. 32	P-16773—No. 32	P-16773—No. 32	P-16773—No. 32	P-16773—No. 32	P-16773—No. 32
14	P-16767	P-16767	P-16767	P-16767	P-16767	P-16767
15	P-11572	P-11572	P-11572	P-11572	P-11572	P-11572
17	P-16756	P-16756	P-16756	P-16756	P-16756	P-16756
18	P-16754—No. 68	P-16754—No. 68	P-16754—No. 68	P-16754—No. 68	P-16754—No. 68	P-16754—No. 68
19	P-16762	P-16762	P-16762	P-16762	P-16762	P-16762
20	P-5636	P-5636	P-5636	P-5636	P-5636	P-5636
21	P-6592	P-6592	P-6592	P-6592	P-6592	P-6592
22		P-18772	P-18772	P-18772	P-18772	P-18772
23	P-16760	P-16760	P-16760	P-16760	P-16760	P-16760
27	P-16765	P-16765	P-16765	P-16765	P-16765	P-16765
30	P-19909	P-22881	P-22881	P-22881	P-22881	P-22881
	P-3199	P-3199	P-3199	P-3199	P-3199	P-3199
31	P-16755	P-16755	P-16755	P-16755	P-16755	P-16755
32	P-16716	P-16716	P-16716	P-16716	P-16716	P-16716
40	P-16717	P-16717	P-16717	P-16717	P-16717	P-16717
41	P-19906	P-22929	P-22929	P-22929	P-22929	P-22929
42	P-19907	P-22927	P-22927	P-22927	P-23890	P-23890
44	P-19910	P-22884	P-22884	P-22884	P-22884	P-22884
45	382323	382324	382324	382324	382325	382325
	Nos. 58-66	**Nos. 58-66**	**Nos. 58-66**	**Nos. 58-66**	**Nos. 58-62**	**Nos. 58-62**
		No. 56 Spark	**No. 56 Spark**	**No. 56 Spark**	**No. 58 Spark**	**No. 56 Spark**
51	P-14745	P-14745	P-14745	P-14745	P-14745	P-14745
52	P-7098					
53	P-15458	P-15458	P-15458	P-15458	P-15458	P-15458
54	P-12780	P-12780	P-12780	P-12780	P-12780	P-12780
55	P-16776—No. 60	P-16776—No. 60	P-16776—No. 60	P-16776—No. 60	P-16776—No. 60	P-16776—No. 60
56	P-5546	P-5546	P-5546	P-5546	P-5546	P-5546
57	P-14618	P-14618	P-14618	P-14618	P-14618	P-14618
59	P-6855	P-6855	P-6855	P-6855	P-6855	P-6855
60	P-17140	P-17140	P-17140	P-17140	P-17140	P-17140
61	P-22851	P-22851	P-22851	P-22851	P-22851	P-22851
62	P-12958	P-12958	P-12958	P-12958	P-12958	P-12958
63	P-16761	P-16761	P-16761	P-16761	P-16761	P-16761
64	P-16753—1-1/8"	P-16753—1-1/8"	P-16753—1-1/16"	P-16753—1-1/8"	P-16753—1-1/8"	P-16753—1-1/8"
65	P-16850	P-16850	P-16850	P-16850	P-16850	P-16850
66	P-21372	P-21372	P-21372	P-21372	P-21372	P-21372
67	P-16757	P-16757	P-16757	P-16757	P-16757	P-16757
68	P-16793	P-16793	P-16793	P-16793	P-16793	P-16793
69	P-7041	P-22948	P-22948	P-22948	P-7041	P-7041
	P-12375	P-18552	P-18552	P-18552	P-12375	P-12375
		P-15831	P-15831	P-15831		
70		P-14646	P-14646	P-14646	P-14646	P-14646
71		P-15346	P-15346	P-15346	P-15346	P-15346
72		P-12823	P-12823	P-12823	P-11969	P-11969
		P-12868	P-12868	P-12868	P-12868	P-12868
		P-8806	P-8806	P-8806	P-8806	P-8806
73	P-14160	P-14160	P-14160	P-14160	P-14160	P-14160
74	P-22713	P-22713	P-22713	P-22713	P-22713	P-22713
*75	P-3292	P-3292	P-3292	P-3292	P-3292	P-3292
76	P-20454	P-20454	P-20454	P-20454	P-20454	P-20454
77		P-3881	P-3881	P-3881	P-3881	P-3881
78		P-13828	P-13828	P-13828	P-13828	P-13828
79	P-17081	P-17081	P-17081	P-17081	P-17081	P-17081
80	P-16161	P-16161	P-16161	P-16161	P-16161	P-16161
*81		P-22951	P-22951	P-22951		
*82		P-22950	P-22950	P-22950		
	SETTINGS Fuel Level—9/16". Fuel Pressure—2 lbs. Throttle Valve Location—Lower edge of throttle valve to come Flush + — .004" from No. 58 idle hole.	SETTINGS Fuel Level—9/16". Fuel Pressure—2 lbs. Throttle Valve Location—Lower edge of throttle valve to come Flush + — .004" from No. 58 idle hole. Spark Hole—No. 56 Spark Hole to be Flush with lower edge of throt. valve.	SETTINGS Fuel Level—9/16". Fuel Pressure—2 lbs. Throttle Valve Location—Lower edge of throttle valve to come Flush + — .004" from No. 58 idle hole. Spark Hole—No. 56 Spark Hole to be Flush with lower edge of throt. valve.	SETTINGS Fuel Level—9/16". Fuel Pressure—2 lbs. Throttle Valve Location—Lower edge of throttle valve to come Flush + — .004" from No. 58 idle hole. Spark Hole—No. 56 Spark Hole to be Flush with lower edge of throt. valve.	SETTINGS Fuel Level—9/16". Fuel Pressure—2 lbs. Throttle Valve Location—Lower edge of throttle valve to come Flush + — .004" from No. 58 idle hole. Spark Hole—No. 56 Spark Hole to be Flush with lower edge of throt. valve.	SETTINGS Fuel Level—9/16". Fuel Pressure—2 lbs. Throttle Valve Location—Lower edge of throttle valve to come Flush + — .006" from No. 58 idle hole. Spark Hole—No. 56 Spark Hole to be Flush with lower edge of throt. valve.

*Parts Not Illustrated.