GENERAL INFORMATION

In writing for more information, or in ordering new material, always refer to the carburetor assembly number stamped on the body casting above gasoline connection.

PRECAUTIONS

To be Taken when Installing or Adjusting a Carburetor to Obtain the Best Results.

Be sure that the gasoline tank, vacuum system and line are free from sediment. Dirt will stop the flow of gasoline or cause the carburetor to flood. Water will rust the vacuum tank parts or fuel pump, cause hard starting, and freeze in the line in cold weather. See that the ignition is properly timed and working correctly. The breaker points, free from pits, must be spaced properly, usually from .018 to .022 of an inch. Also see that the spark plugs are clean and the points have the proper gap, usually .025 to .030 of an inch—or the thickness of a slick dime, or hack saw blade.

Try the motor for compression, as proper carburetion cannot be obtained with faulty ignition or bad compression in one or more cylinders. Bad compression may be caused by scored cylinders, bad valve seats, warped valves, bad piston rings, or the valve lifter adjusting screws being lashed too tight.

When an idle adjustment cannot be obtained, examine the fuel supply system for a possible flow of gas through the suction line. Examine the intake manifold gaskets for leaks, by pouring a little gasoline over each gasket. Should there be a leak, the motor will immediately speed up and run smoothly for an instant. Worn intake valve stems and guides also will cause trouble at idle speed.

SCHEBLER

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The World's Finest CARBURETORS

IMPORTANT!

It is most important that you follow exactly the instructions for adjustment as given on the inside of this folder and that the correct adjustments be secured. Be sure that you have the idle adjustment absolutely correct.

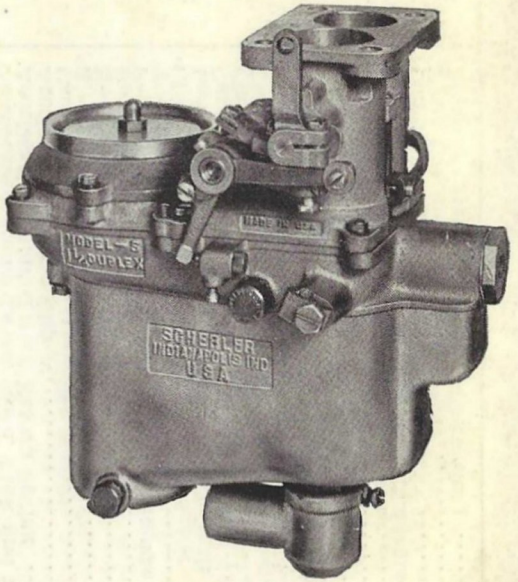
STARTING AND WARMING UP

During the Winter months, with the engine cold, set the throttle about one-half open, release clutch and pull the control all the way out. When the motor starts, push the control half way in. Gradually push in the control, as the engine warms up, until control is entirely in.

During moderate weather, the control is seldom pulled out more than one-quarter way. When the engine is hot, it is not necessary to use the control.

Form A8-530 Printed in U. S. A.

SCHEBLER MODEL "S" DUPLEX CARBURETOR



LIST PRICES

1¼ inch size	$60.00
1½ inch size	87.50

$1.50 Higher West of 105th Meridian

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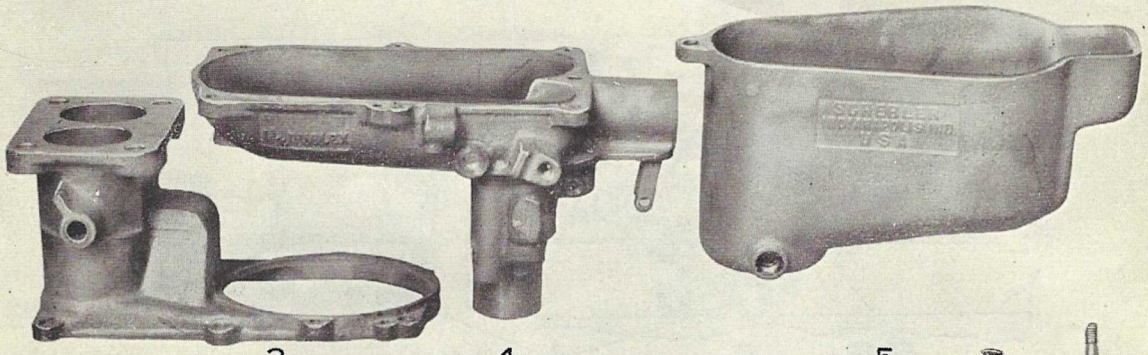
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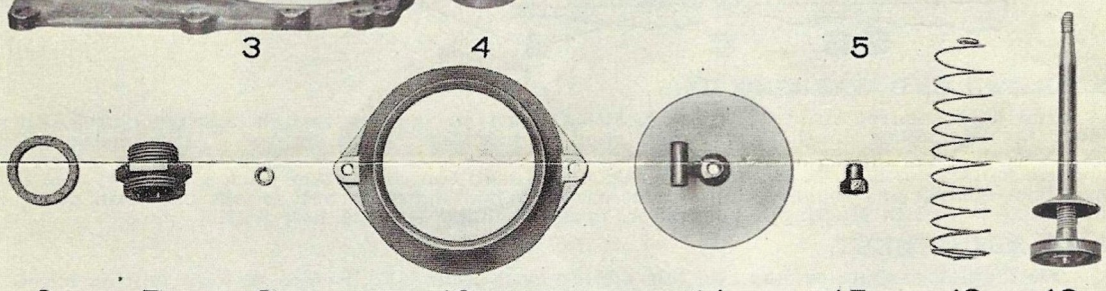
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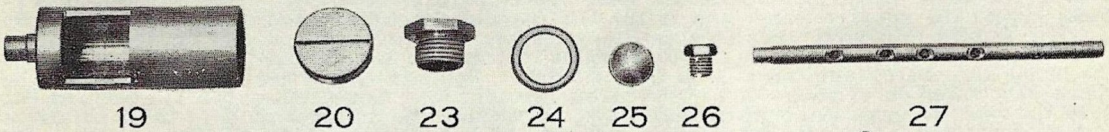
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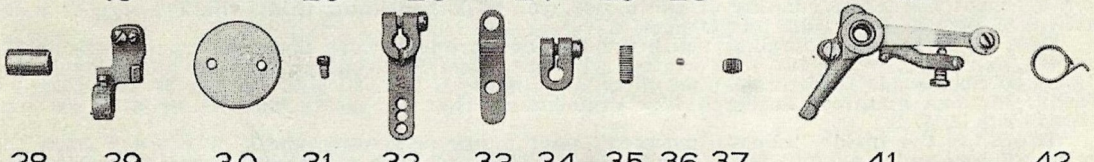
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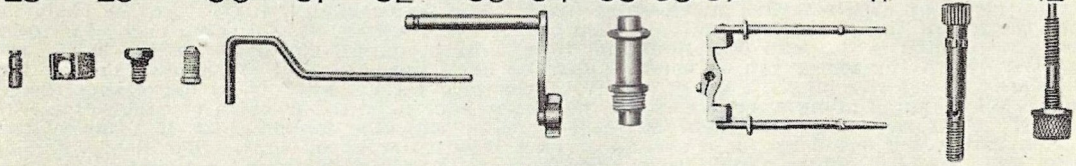
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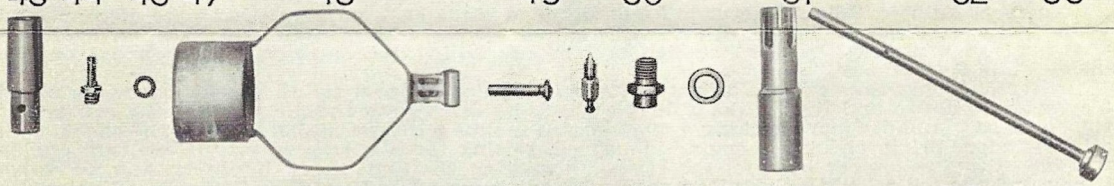
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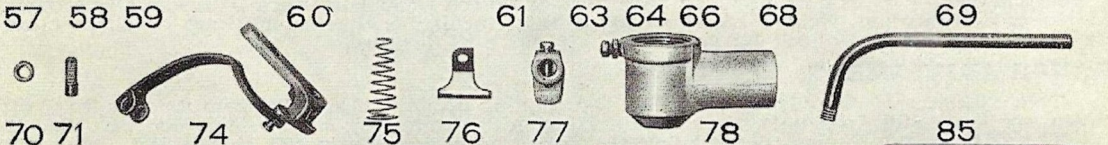
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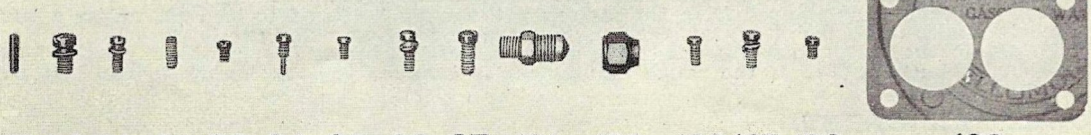
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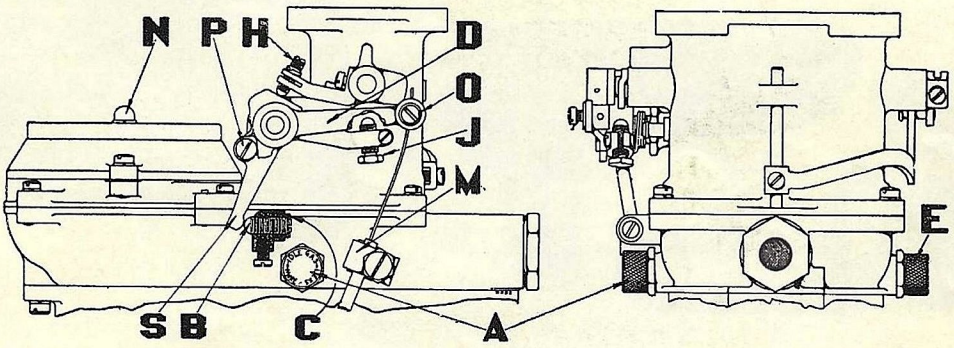
PRICE LIST OF REPAIR PARTS
MODEL "S" DUPLEX CARBURETOR

All orders for parts must show both the symbol number (below) and the carburetor assembly number (on the body of carburetor above gasoline connection).

Prices Subject to Change Without Notice.

Symbol Number	NAME OF PART	List Price 1¼"	1½"
1	Carburetor Complete—1¼"	$60.00	.....
1	Carburetor Complete—1½"	.....	$87.50
3	Carburetor Body—Upper	11.50	15.00
4	Carburetor Body—Lower	14.40	16.00
5	Carburetor Bowl	9.20	10.50
6	Bowl Gasket	.05	.05
7	Bowl Retaining Nut	.60	.60
8	Lock Washer, each	.02	.02
10	Air Valve Funnel	2.30	2.60
14	Air Valve Disc and Arm	2.30	2.75
15	Air Valve Nut	.25	.25
16	Air Valve Spring	.25	.25
18	Dash Pot Piston Complete	2.30	2.60
19	Dash Pot Cylinder	3.45	3.75
20	Dash Pot Cylinder Cap	.35	.35
23	Gasoline Inlet Nut	.35	.35
24	Gasoline Inlet Nut Gasket	.05	.05
25	Strainer Screen	.20	.20
26	Drain Plug	.10	.10
27	Throttle Shaft	.60	.60
28	Throttle Shaft Bushing, not used in Cast Iron Bodies	.25	.25
29	Throttle Adjusting Stop	1.15	1.15
30	Throttle Disc, each	.25	.25
31	Throttle Disc Screws, each	.05	.05
32	Throttle Lever	.70	.70
33	Throttle Lever Loose Type	.50	.50
34	Throttle Loose Lever Stop	.50	.50
35	Range Adjusting Screw	.10	.10
36	Friction Plug	.05	.05
37	Range Adjusting Bushing	.10	.10
41	Dash Control Lever Assembly	1.75	1.75
42	Dash Control Lever Spring	.10	.10
43	Dash Control Lever Spring Pin	.05	.05
44	Dash Control Tube Clamp	.15	.15
45	Dash Control Tube Clamp Screw	.15	.15
47	Cam Tappet Screw	.25	.25
48	Needle Valve Lift Lever	.60	.70
49	Fulcrum Lever Shaft and Block Complete	.85	1.00
50	Fulcrum Shaft Bushing	.35	.35
51	Needle Valve Complete	2.30	2.60
52A	Needle Valve Seat, each	1.15	1.15
53	Idle Adjusment, each	.85	.85
57	Venturi, each	.85	.85
58	Nozzle, each	.25	.25
59	Nozzle Gasket, each	.05	.05
60	Float Assembly	1.45	1.45
61	Float Lever Bearing Pin Complete	.30	.30
63	Float Valve	.75	.75
64	Float Valve Seat	.25	1.00
66	Float Valve Seat Gasket	.05	.05
68	Accelerating Pump Cylinder	.95	1.10
69	Accelerating Pump Piston	.60	.60
70	Accelerating Pump Piston Washer	.05	.05
71	Accelerating Pump Cross Passage, each	.20	.20
74	Accelerating Pump Lever, Yoke, Link and Pin	1.30	1.30
75	Accelerating Pump Piston Return Spring	.10	.10
76	Accelerating Pump Clip	.10	.10
77	Cam	.50	.50
78	Air Intake	1.75	1.75
88	Body Dowel Taper Pin, each	.05	.05
89	Bowl Retaining Screw	.10	.10
91	Screw for A. V. Funnel, D. P. Cyl. & Range Adj. Lock, ea.	.05	.05
92	Throttle Stop Adjusting Screw	.10	.10
93	Clamp Screw for Throttle Stop Adj. Screw	.05	.05
94	Lock Screw for Symbols 29, 41, 74, 77, each	.10	.10
95	Cam Tappet Screw Lock Screw	.05	.05
96	Clamp Screw for Body Castings, each	.05	.05
97	Clamp Screw for Throttle Lever	.05	.05
101	Gasoline Nipple	.25	.25
102	Gasoline Nut	.25	.25
106	D. C. Lever Binding Post Screw	.05	.05
107	D. C. Loose Lever Stop Screw	.05	.05
108	Range Adjusting Screw Lock Screw	.05	.05
109	Flange Gasket	.10	.10
202	Stud for Air Cleaner Fitting, (not illustrated)	.10	.10
204	Compensating Tube (not illustrated)	.50	.50
207	Float Bracket, (not illustrated)	.50	.50
233	Float Bracket Screw, (not illustrated)	.05	.05

ADJUSTMENT SCHEBLER MODEL "S" DUPLEX CARBURETOR



STARTING AND WARMING UP.

Pull dash control out to extreme position, turn on ignition switch, release clutch, open hand throttle about one-half way and step on starting switch button. After motor fires, immediately move dash control about half way back or to the position where the car will operate satisfactorily. As motor warms up move dash control further back gradually. Do not use dash control any longer than is necessary. **When motor is hot do not use dash control.** If trouble is had in starting a hot motor, open the hand throttle half way.

IDLE ADJUSTMENT.

The duplex carburetor has two idle adjustments A and E. Before making any carburetor adjustments warm up the motor to average driving temperature. Both adjustments A and E turn in the same direction for rich and lean. Turning these adjustments to the right (clockwise) makes the mixture leaner and to the left (counter-clockwise) makes the mixture richer.

The Duplex Carburetor has two throttle openings into the manifold and on some engines the inside throttle opening feeds the four center cylinders 3, 4, 5, 6 while on the other engines the inside throttle opening feeds 1, 2, 7, 8 cylinders. You can check this by disconnecting the spark plug wires on cylinders 3, 4, 5, 6. After disconnecting these wires turn idle adjustment A to the right or clockwise with motor idling. If turning the adjustment A to the lean direction does not effect the running of the motor, you will then know that cylinders 1, 2, 7, 8 are controlled by the other idle adjustment E.

Most all Lycoming 8 engines using the Duplex Carburetor are designed so that the inside throttle opening governs the four center cylinders. The Studebaker 8—using a Duplex is designed so that inside throttle opening governs cylinders 1, 2, 7, 8. Marmon Big 8—using Duplex Carburetor has manifold designed like Studebaker, that is, inside throttle opening governs cylinders 1, 2, 7, 8.

To adjust the inside "Idle Adjustment" next to motor remove spark plug wires from the four cylinders which are not fed by the inside throttle and with the engine idling approximately 5 miles per hour with retarded spark—turn inside "Idle Adjustment" to the right or clockwise until the fan of the motor faulters. As soon as the fan faulters, stop turning this adjustment clockwise (which is the lean direction) and turn it back counter-clockwise (which is the rich direction) until the motor fan does not faulter or until the engine is idling good on the four cylinders you are checking. Another way to check for "correct idle" is by depressing the air valve. With engine idling approximately 5 miles per hour depress air valve of carburetor 1/32" to 1/16" off its seat. If adjustment is too lean motor will stop immediately, if adjustment is to rich motor will speed up for a second or two, if adjustment is right, when depressing air valve 1/32" to 1/16" motor should turn over four or five times without any change in speed and then stop.

To check outside "Idle Adjustment", put the plug wires back on plugs that were disconnected while you were checking inside adjustment and then remove plug wires from the four cylinders that are not controlled by the outside throttle and adjust the same way as you did on the inside "Idle Adjustment."

After checking the two idle adjustments individually, connect up all spark plug wires so all 8 cylinders will fire and then make a double check by depressing the air valve of the carburetor the same as you did when checking 4 cylinders at a time. Before making your final check with all 8 cylinders firing, check the engine idle speed, setting the idle stop screw "H" so that engine will idle 5 to 6 miles per hour on the road. In making the final check by depressing air valve if you find the job a little rich or lean with all 8 cylinders hooked-up, turn both idle adjustments in the same direction, rich or lean to correct this, turning each one only two or three clicks at a time and then re-check by depressing air valve of carburetor.

RANGE ADJUSTMENT.

This adjustment is only effective in the driving range at speeds from twenty to forty miles per hour and does not affect acceleration or hill climbing with wide open throttle.

The adjustment is made by turning the range adjusting screw **(B)** to the left for a lean mixture and to the right for a rich mixture in the driving range.

This adjustment as shipped from the factory will usually be found to be best, unless a lean or richened mixture is necessary at speeds from twenty to forty miles per hour.

To obtain the factory setting, screw the range adjusting screw **(B)** in or out so the head is flush with bushing **(C)**. If the range adjustment is changed it is necessary to readjust the idle mixture.

POWER ADJUSTMENT.

The carburetor will give the best mixture for speed and maximum power on the hills when the bottom of the head of power screw "J" is setting so that it measures 7/32 inch to the arm that holds screw "J". On the later Duplex Carburetors there is a small pin located at the side of screw "J" and the original factory setting is to have the bottom of the head on screw "J" flush with the bottom of the pin. In high altitudes more power can be obtained by leaning up on the power mixture—turning screw "J" to the left (counter-clockwise) 3 to 5 complete turns. Turning screw "J" to the right richens the power mixture.