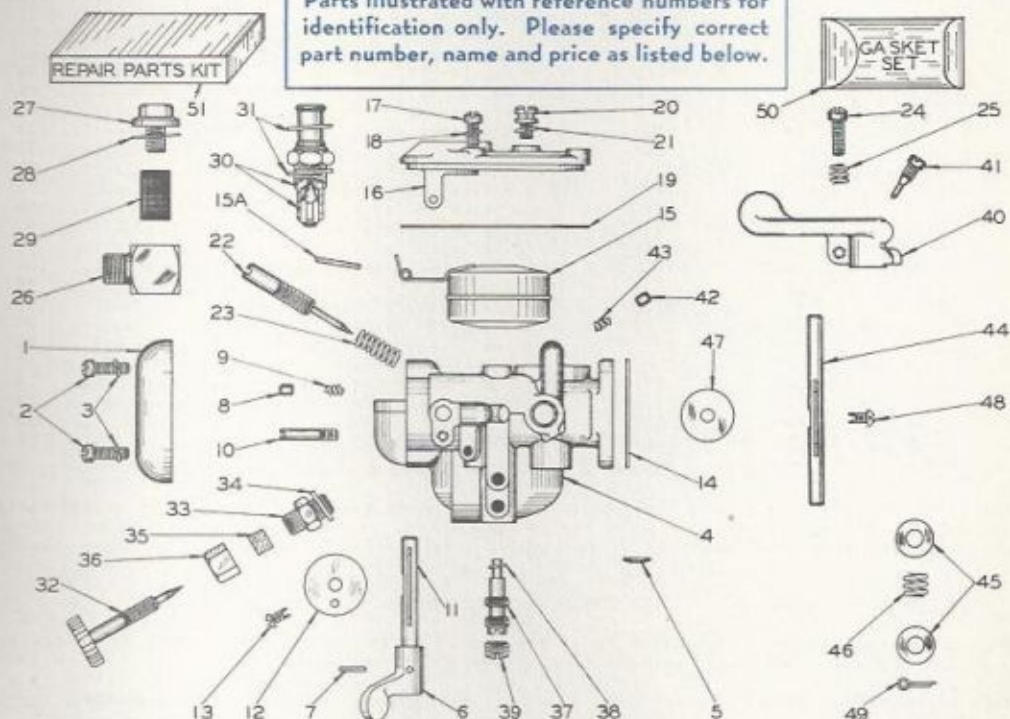


LIST PRICE: \$10.25

CARBURETOR MODELS: MS-90A - MS-92A

YEARS BUILT: 1936-1938

Parts illustrated with reference numbers for identification only. Please specify correct part number, name and price as listed below.



Ref. No.	MS-90A	MS-92A	Part Name	Price
No. Req.	Part No.	Part No.		Each
1	05447	05447	Air Deflector.....	\$.30
2	054	054	Air Deflector Screw.....	.06
3	0992	0992	Air Deflector Screw Lockwasher.....	.02
4	05735	05755	Body.....	2.90
5	*02531	02531	Body Welch Plug.....	.03
6	02865	02865	Choke Lever.....	.30
7	03208	03208	Choke Lever Pin.....	.03
8	*05454	05454	Choke Lever Friction Pin.....	.06
9	*03860	03860	Choke Lever Friction Spring.....	.06
10	04594	04594	Choke Lever Stop Pin.....	.06
11	05453	05453	Choke Shaft.....	.23
12	05458	05458	Choke Shutter.....	.17
13	*04849	04849	Choke Shutter Screw.....	.06
14	05591	05591	Flange Gasket.....	.06
15	01459	01459	Float.....	.85
15A	*03369	03369	Float Lever Pin.....	.06
16	01794	01794	Float Bowl Cover.....	.30
17	054	054	Float Bowl Cover Screw.....	.06
18	0992	0992	Float Bowl Cover Screw Lockwasher.....	.02
19	01845	01845	Float Bowl Cover Gasket.....	.12
20	02434	01434	Float Bowl Cover Vent Screw.....	.23
21	0759	0759	Float Bowl Cover Vent Screw Lockwasher.....	.06

Ref No.	No. Req.	MS-90A Part No.	MS-92A Part No.	Part Name	Price Each
22	1	*05456	05456	Idle Adjustment Screw.....	\$.35
23	1	*05457	05457	Idle Adjustment Screw Spring.....	.06
24	1	*05095	05095	Idle Speed Regulating Screw.....	.06
25	1	*0788	0788	Idle Speed Regulating Screw Spring.....	.06
26	1	03318	03318	Inlet Connection.....	.30
27	1	02409	02409	Inlet Connection Screw.....	.12
28	1	02410	02410	Inlet Connection Screw Gasket.....	.02
29	1	0802	0802	Inlet Screen.....	.12
30	1	*04050	04050	Inlet Needle & Seat.....	1.15
31	2	0337	0337	Inlet Seat Gasket.....	.02
32	1	*05460	05460	Main Adjustment Screw.....	.45
33	1	0702	0702	Main Adjustment Screw Gland.....	.30
34	1	0676	0676	Main Adjustment Screw Gland Gasket.....	.02
35	1	0705	0705	Main Adjustment Screw Packing.....	.06
36	1	0703	0703	Main Adjustment Screw Packing Nut.....	.17
37	1	*05569	05569	Main Nozzle.....	.35
38	1	02817	02817	Main Nozzle Gasket.....	.02
39	1	01102	01102	Main Nozzle Plug Screw.....	.06
40	1	05446	05446	Throttle Lever.....	.60
41	1	*051	051	Throttle Lever Retaining Screw.....	.06
42	1	05454	05454	Throttle Lever Friction Pin.....	.06
43	1	03860	03860	Throttle Lever Friction Spring.....	.06
44	1	*05731	05731	Throttle Shaft.....	.30
45	2	*0758	0758	Throttle Shaft Friction Washer.....	.03
46	1	*0737	0737	Throttle Shaft Friction Spring.....	.06
47	1	*04119		Throttle Shutter.....	.12
47	1		03303	Throttle Shutter.....	.17
48	1	*04849	04849	Throttle Shutter Screw.....	.06
49	1	*0379	0379	Throttle Friction Spring Clip.....	.02
50		*06889	06889	Gasket Set.....	.30
51		08277	None	Repair Parts Kit.....	3.30

(*) Indicates contents of designated Repair Parts Kit.

FLOAT LEVEL: To set correctly remove carburetor float bowl cover assembly, turn this mechanism upside down and with float lever resting on inlet needle bend lever, if necessary, to give a distance of 15/32nds of an inch from flat outer rim of float bowl cover (WITHOUT GASKET) to then lower edge of float.

ADJUSTMENT INSTRUCTIONS

Close Main Adjustment Screw (32) by turning to the right, or in, to its seat (never force against seat or injury to Main Nozzle will result) then open two full turns.

Close Idle Adjustment Screw (22) to its seat, then open three-fourths (3/4ths) of a full turn.

Open throttle approximately one-half (1/2) of its travel, choke carburetor in usual manner to start motor, and run until thoroughly warm.

Run motor with throttle at, or near wide open position. Adjust spark lever to give maximum speed and then close the Main Adjustment Screw (32) until motor slows down for want of fuel. Then turn this Adjustment Screw in reverse direction (usually from one-eighth (1/8th) to one-quarter (1/4) of a full turn) to that position where motor runs smoothly and with power. The final or correct setting should be about one to one and one-half turns open from closed position.

Close throttle and retard spark until engine fires evenly. Adjust Idle Speed Regulating Screw (24) to operate motor at slightly faster than normal idling speed. Turn Idle Adjustment Screw (22) in slowly until a noticeable slowing or missing of the motor occurs; then turn in reverse direction until motor runs evenly. Final or correct setting should be approximately three-eighths (3/8ths) to five-eighths (5/8ths) of a full turn open from closed position.

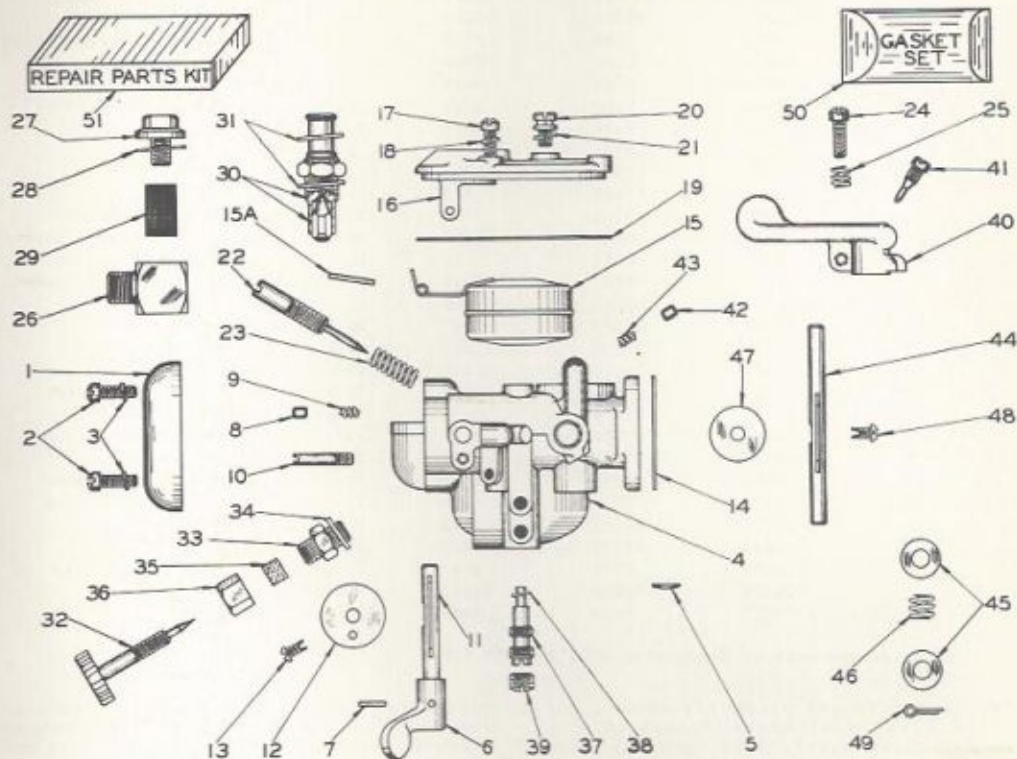
Adjust Idle Speed Regulating Screw (24) to operate motor at a desired idling speed under load. A smoother idle is oftentimes obtained by setting the Idle Speed Regulating Screw for a speed slightly faster than the normal idle and then reducing speed by further retarding the spark.

Revised 2/10/48

YEARS BUILT: 1937-39

CARBURETOR MODELS:
MS-85C, MS-85D, MS-85DX

SUPERSEDURES: MS-85C REPLACES MS-85A & MS-85B



WHEN ORDERING, PLEASE SPECIFY FULL CARBURETOR MODEL AND COMPLETE PART NUMBER AND NAME.

Ref. No.	No. Req.	MS-85C Part No.	MS-85D Part No.	MS-85DX Part No.	Part Name
1	1	05447	05447	05447	Air Deflector
2	2	054	054	054	Air Deflector Screw
3	2	0992	0992	0992	Air Deflector Screw Lockwasher
4	1	05736	05736	05736	Body
5	1	*02531	02531	02531	Body Welch Plug
6	1	02865	02865	02865	Choke Lever
7	1	03208	03208	03208	Choke Lever Pin
8	1	*05454	05454	05454	Choke Lever Friction Pin
9	1	*03860	03860	03860	Choke Lever Friction Spring
10	1	04594	04594	04594	Choke Lever Stop Pin
11	1	05453	05453	05453	Choke Shaft
12	1	05458	05458	05458	Choke Shutter
13	1	*04849	04849	04849	Choke Shutter Screw
14	1	05591	05591	05591	Flange Gasket
15	1	01459	01459	01459	Float
15A	1	*03369	03369	03369	Float Lever Pin
16	1	01794	01794	01794	Float Bowl Cover

TILLOTSON MANUFACTURING CO.
PARTS AND SERVICE DIVISION
TOLEDO 12, OHIO, U. S. A.

Specifications or part numbers subject to change.

Ref. No.	No. Req.	MS-85C Part No.	MS-85D Part No.	MS-85DX Part No.	Part Name
17	4	054	054	054	Float Bowl Cover Screw
18	4	0992	0992	0992	Float Bowl Cover Screw Lockwasher
19	1	01845	01845	01845	Float Bowl Cover Gasket
20	1	01434	01434	01434	Float Bowl Cover Vent Screw
21	1	0759	0759	0759	Float Bowl Cover Vent Screw Lockwasher
22	1	*05456	05456	05456	Idle Adjustment Screw
23	1	*05457	05457	05457	Idle Adjustment Screw Spring
24	1	*05095	05095	05095	Idle Speed Regulating Screw
25	1	* 0788	0788	0788	Idle Speed Regulating Screw Spring
26	1	03318	None	None	Inlet Connection
27	1	02409	None	None	Inlet Connection Screw
28	1	02410	None	None	Inlet Connection Screw Gasket
29	1	0802	None	None	Inlet Screen
30	1	*04050	06342	06342	Inlet Needle & Seat
31	2	0337	0337	0337	Inlet Seat Gasket
32	1	*05460	05460	05460	Main Adjustment Screw
33	1	0702	0702	0702	Main Adjustment Screw Gland
34	1	0676	0676	0676	Main Adjustment Screw Gland Gasket
35	1	0705	0705	0705	Main Adjustment Screw Packing
36	1	0703	0703	0703	Main Adjustment Screw Packing Nut
37	1	*05569	05569	05569	Main Nozzle
38	1	02817	02817	02817	Main Nozzle Gasket
39	1	01102	01102	01102	Main Nozzle Plug Screw
40	1	05446	05446	05446	Throttle Lever
41	1	* 051	051	051	Throttle Lever Retaining Screw
42	1	05454	05454	None	Throttle Lever Friction Pin
43	1	03860	03860	None	Throttle Lever Friction Spring
44	1	*05731	05731	05731	Throttle Shaft
45	2	* 0758	0758	None	Throttle Shaft Friction Washer
46	1	* 0737	0737	None	Throttle Shaft Friction Spring
47	1	*04119	04119	04119	Throttle Shutter
48	1	*04849	04849	04849	Throttle Shutter Screw
49	1	* 0379	0379	None	Throttle Friction Spring Clip
50		*06889	06889	06889	GASKET SET
51		08277	None	None	REPAIR PARTS KIT

(*) Indicates contents of designated REPAIR PARTS KIT.

FLOAT LEVEL: To set correctly remove carburetor float bowl cover assembly, turn this mechanism upside down and with float lever resting on inlet needle bend lever, if necessary, to give a distance of 15/32nds of an inch from flat outer rim of float bowl cover (WITHOUT GASKET) to then lower edge of float.

ADJUSTMENT INSTRUCTIONS

Close Main Adjustment Screw (32) by turning to the right, or in, to its seat (never force against seat or injury to Main Nozzle will result) then open two full turns.

Close Idle Adjustment Screw (22) to its seat, then open three-fourths (3/4ths) of a full turn.

Open throttle approximately one-half (1/2) of its travel, choke carburetor in usual manner to start motor, and run until thoroughly warm.

Run motor with throttle at, or near wide open position. Adjust spark lever to give maximum speed and then close the Main Adjust-

ment Screw (32) until motor slows down for want of fuel. Then turn this Adjustment Screw in reverse direction (usually from one-eighth (1/8th) to one-quarter (1/4) of a full turn) to that position where motor runs smoothly and with power. The final or correct setting should be about one to one and one-half turns open from closed position.

Close throttle and retard spark until engine fires evenly. Adjust Idle Speed Regulating Screw (24) to operate motor at slightly faster than normal idling speed. Turn Idle Adjustment Screw (22) in slowly until a noticeable slowing or missing of the motor occurs; then turn in reverse direction until motor runs evenly. Final or correct setting should be approximately three-eighths (3/8ths) to five-eighths (5/8ths) of a full turn open from closed position.

Adjust Idle Speed Regulating Screw (24) to operate motor at a desired idling speed under load. A smoother idle is oftentimes obtained by setting the Idle Speed Regulating Screw for a speed slightly faster than the normal idle and then reducing speed by further retarding the spark.

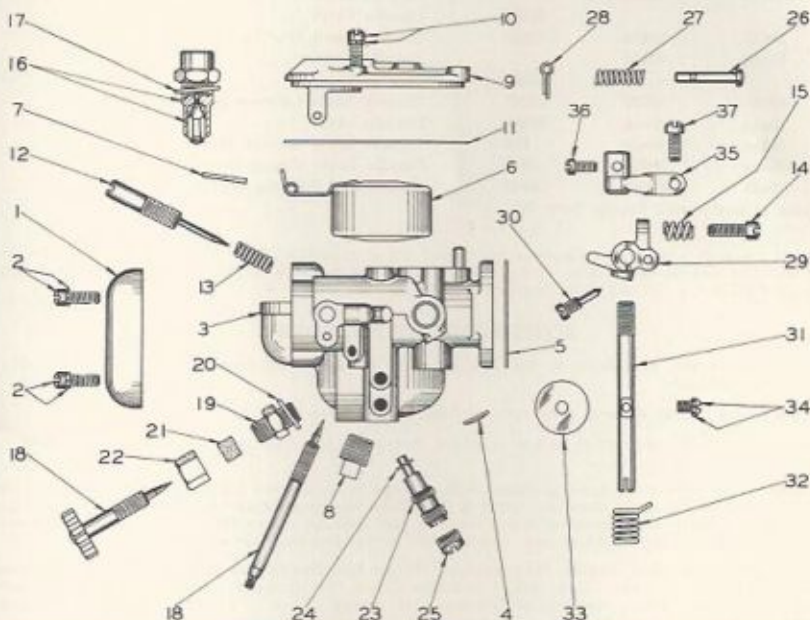
Revised 8/53

LIST PRICE: \$9.75

CARBURETOR MODELS: MS-111A
MS-112A
MS-114A

YEAR BUILT: 1940

Parts illustrated with reference numbers for identification only. Please specify correct part number, name and price as listed below.



REF. NO.	NO. REQ.	MS-111A PART NO.	MS-112A PART NO.	MS-114A PART NO.	PART NAME	PRICE EACH
1	1	06652	None	None	Air Deflector	\$.30
2	2	08315	None	None	Air Deflector Screw and Lockwasher	.06
3	1	06636	08634	06706	Body	2.90
4	1	02531	02531	02531	Body Welch Plug	.03
5	1	05591	05591	05591	Flange Gasket	.06
6	1	01459	01459	01459	Float	.85
7	1	03369	03369	03369	Float Lever Pinion Pin	.06
8	1	None	None	0244	Float Bowl Drain Plug	.12
9	1	06281	06281	06281	Float Bowl Cover	.30
10	4	08315	08315	08315	Float Bowl Cover Screw and Lockwasher	.06
11	1	01845	01845	01845	Float Bowl Cover Gasket	.12
12	1	05456	05456	05456	Idle Adjustment Screw	.35
13	1	05457	05457	05457	Idle Adjustment Screw Spring	.06
14	1	05095	05095	05095	Idle Speed Regulating Screw	.06
15	1	0788	0788	0788	Idle Speed Regulating Screw Spring	.06
16	1	06279	06279	06279	Inlet Needle and Seat	1.00
17	1	0337	0337	0337	Inlet Seat Gasket	.02
18	1	05460	06672	06672	Main Adjustment Screw	.45
18	1	0702	0702	0702	Main Adjustment Screw Gland	.30

REF. NO.	NO. REQ.	MS-111A PART NO.	MS-112A PART NO.	MS-114A PART NO.	PART NAME	PRICE EACH
20	1	0676	0676	0676	Main Adjustment Screw Gland Gasket	\$.02
21	1	0705	0705	0705	Main Adjustment Screw Packing	.06
22	1	0703	0703	0703	Main Adjustment Screw Packing Nut	.17
23	1	05569	05569	06704	Main Nozzle	.35
24	1	02817	02817	02817	Main Nozzle Gasket	.02
25	1	01102	01102	01102	Main Nozzle Channel Plug Screw	.06
26	1	06280	06280	06280	Primer Plunger	.12
27	1	06282	06282	06282	Primer Plunger Spring	.06
28	1	0379	0379	0379	Primer Plunger Cotter Pin	.02
29	1	06632	06632	06632	Throttle Stop Lever	.30
30	1	051	051	051	Throttle Stop Lever Retaining Screw	.06
31	1	06640	06640		Throttle Shaft	.30
31	1			06595	Throttle Shaft	.35
32	1	06634	06634	06634	Throttle Shaft Friction Spring	.06
33	1	04119	04119		Throttle Shutter	.12
33	1			03303	Throttle Shutter	.17
34	1	08317	08317	08317	Throttle Shutter Screw and Lockwasher	.06
35	1	None	None	06866	Throttle Lever	.45
36	1	None	None	058	Throttle Lever Swivel Screw	.06
37	1	None	None	0240	Throttle Lever Clamp Screw	.06
38	1	08643	08643	08643	Gasket and Packing Set (Not illustrated)	.25

(*) Indicates contents of designated Repair Parts Kit

FLOAT LEVEL: To set correctly—remove carburetor float bowl cover assembly, turn this mechanism upside down and with float lever resting on inlet needle bend lever, if necessary, to give a distance of 15/32pd of an inch from float bowl cover machine faced flange (WITHOUT GASKET) to then lower edge of float.

ADJUSTMENT INSTRUCTIONS

Close Main Adjustment Screw (18) by turning to the right, or in, to its seat (never force against seat or injury to Main Nozzle will result) then open two full turns.

Close Idle Adjustment Screw (12) to its seat, then open (3/4ths) three-fourths of a full turn.

Open throttle approximately (1/2) one-half of its travel, prime carburetor in usual manner to start motor, and run until thoroughly warm.

Run motor with throttle at, or near, wide open position. Adjust spark lever to give maximum speed and then close the Main Adjustment Screw (18) until motor slows down for want of fuel. Then turn this Adjustment Screw in reverse direction (usually from (1/8th) one-eighth to (1/4th) one-quarter of a full turn) to that position where motor runs smoothly and with power. The final or correct setting should be about one to one and one-half turns open from closed position.

Close throttle and retard spark until engine fires evenly. Adjust Idle Speed Regulating Screw (14) to operate motor at slightly faster than normal idling speed. Turn Idle Adjustment Screw (12) in slowly—until a noticeable slowing or missing of the motor occurs; then turn in reverse direction until motor runs evenly. Final or correct setting should be approximately (3/8ths) three-eighths to (5/8ths) five-eighths of a full turn open from closed position.

Adjust Idle Speed Regulating Screw (14) to operate motor at desired idling speed under load. A smoother idle is oftentimes obtained by setting the Idle Speed Regulating Screw for a speed slightly faster than the normal idle and then reducing speed by further retarding the spark.

SERVICE HINTS

Always strain fuel through suitable medium and have proper fuel mixture when filling tank. Remove, drain and inspect carburetor occasionally. When deposits of dirt and water are observed in float bowl remove Plug Screw (25), and both Idle and Main Adjustment Screw Assemblies; then clean channels with compressed air. If Main Nozzle (23) is removed for cleaning be sure to replace its Gasket (24) when reassembling.

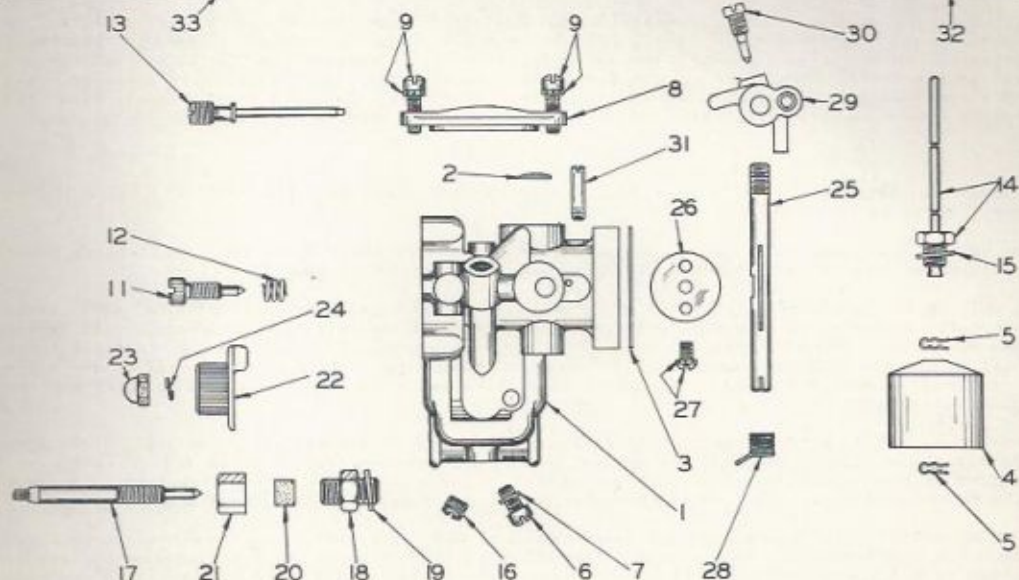
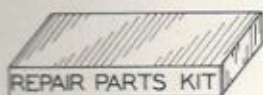
Revised 11/5/48

LIST PRICE: \$7.75

YEAR BUILT: 1941

CARBURETOR MODEL: AJ-1A

Parts illustrated with reference numbers for identification only. Please specify correct part number, name and price as listed below.



Ref. No.	No. Req.	Part No.	Part Name	Price Each
1	1	06879	Body.....	\$2.90
2	1	*02531	Body Channel Welch Plug.....	.03
3	1	05591	Flange Gasket.....	.06
4	1	08215	Float.....	.30
5	2	*05425	Float Retaining Cotter Clip.....	.01
6	1	0164	Float Bowl Drain Plug.....	.06
7	1	0648	Float Bowl Drain Plug Gasket.....	.02
8	1	06882	Float Bowl Cover.....	.23
9	2	08315	Float Bowl Cover Screw & Lockwasher.....	.06
11	1	*06910	Idle Adjustment Screw.....	.23
12	1	*05725	Idle Adjustment Screw Spring.....	.06
13	1	*06905	Idle Tube.....	.45
14	1	*06941	Inlet Valve, Seat and Gasket.....	.90
15	1	0212	Inlet Seat Gasket.....	.02
16	1	*02395	Inlet Valve Channel Plug Screw.....	.06
17	1	*06921	Main Adjustment Screw.....	.45
18	1	0702	Main Adjustment Screw Gland.....	.30
19	1	0676	Main Adjustment Screw Gland Gasket.....	.02
20	1	0705	Main Adjustment Screw Packing.....	.06
21	1	0703	Main Adjustment Screw Packing Nut.....	.17
22	1	06923	Main Adjustment Knob.....	.23

Ref. No.	No. Req.	Part No.	Part Name	Price Each
23	1	*06924	Main Adjustment Acorn Nut.....	\$.12
24	1	*01675	Main Adjustment Acorn Nut Lockwasher.....	.02
25	1	*06903	Throttle Shaft.....	.30
26	1	*06984	Throttle Shutter.....	.12
27	1	*08317	Throttle Shutter Screw & Lockwasher.....	.06
28	1	*06634	Throttle Return Spring.....	.06
29	1	07000	Throttle Stop Lever.....	.30
30	1	* 051	Throttle Stop Lever Retaining Screw.....	.06
31	1	06918	Throttle Stop Pin.....	.06
32		*07082	Gasket & Packing Set.....	.20
33		08204	Repair Parts Kit.....	2.75

(*) Indicates contents of designated Repair Parts Kit

FUEL LEVEL: Is approximately correct when 11/16ths of an inch below bowl rim. Float is positioned on Valve Stem between 2 encircling slots and held by retainer clips. A constantly higher than normal level requires careful valve and seat cleaning or replacement. To replace Inlet Valve and Seat Assembly first remove Cover, Plug Screw and top Cotter Clip encircling valve. Force valve downward until parallel with Float top then with thumb and forefinger draw valve through bottom of bowl. Float and lower Cotter Clip will fall from Bowl - socket wrench can now be used to easily remove valve seat.

ADJUSTMENT INSTRUCTIONS

Before starting engine check for proper fuel supply in tank, open Fuel Line Shut Off Valve and be certain air valve on Fuel Tank cap is open.

Separate manual carburetor adjustments are provided. Main Adjustment Screw (17) controlling power range mixture and Idle Adjustment Screw (11) governing idle mixture at CLOSED throttle.

INITIAL ADJUSTMENT: Completely close Idle Adjustment Screw (11) by turning in (clockwise) until seated (without forcing) then turn back in opposite direction about one full turn. Proceed in like manner with Main Adjustment Screw (17) except open about one and one-half (1-1/2) turns after first being closed (if a numbered Main Adjustment Knob or Lever is being used open to number specified in Engine Manual or "RICH" position indicated on panel). Now choke and start engine in usual manner and run until thoroughly warm.

POWER RANGE ADJUSTMENT: With engine running at a constant speed of approximately one-third (1/3) open throttle position, slowly turn Main Adjustment Screw (17) inward by 1/4th steps (clockwise) until motor begins to lose speed, then turn back in opposite direction (in 1/8th turn steps) until maximum speed and power is obtained. This should then be the correct final Main Adjustment Screw setting.

IDLE MIXTURE ADJUSTMENT: This adjustment should only be made *AFTER* the above mentioned power range adjustment has been completed. With engine idling at closed throttle position (desired slowest speed), slowly turn Idle Adjustment Screw (11) inward (clockwise) until motor begins to lose speed and miss or flutter, then turn back in opposite direction (usually about 1/8th of a turn) until engine functions smoothly and steadily, which is then correct setting.

FINAL ADJUSTMENT: Alternately open and close throttle a few times for adjustment test. If acceleration hesitancy or stalling at idle speed occurs, entire adjustment procedure, outlined above, should be repeated. Warm Motor only requires opening of throttle and one or two vigorous pulls on starter rope, (choking not required unless previous experience indicates otherwise). Regardless of altitude or climatic conditions a proper carburetor adjustment can be made by following the above rules - which eliminates jet changes.

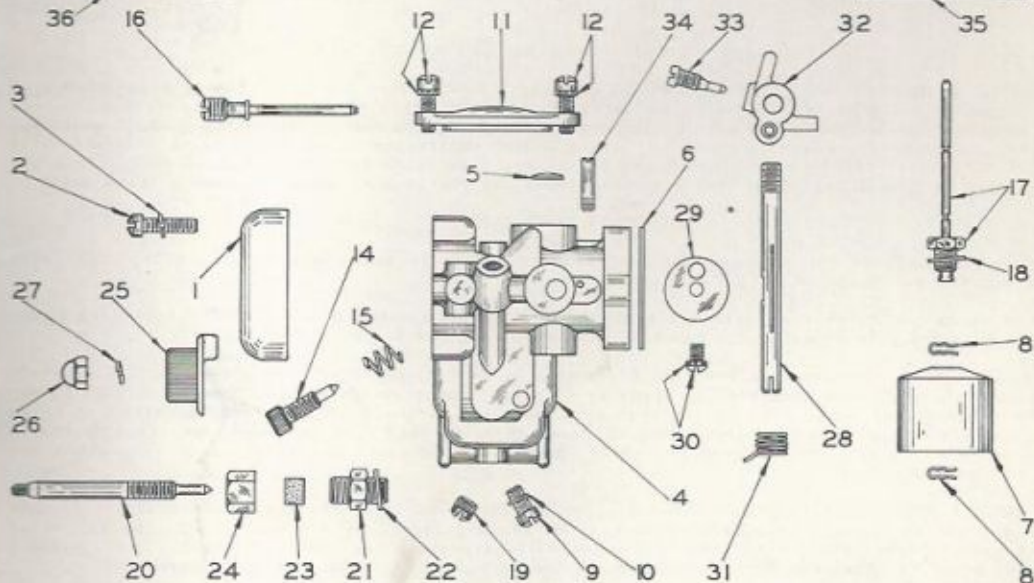
Revised 3/4/48

LIST PRICE: \$7.75

YEARS BUILT: 1941-42

CARBURETOR MODEL: AJ-2A

Parts illustrated with reference numbers for identification only. Please specify correct part number, name and price as listed below.



Ref. No.	No. Req.	Part No.	Part Name	Price Each
1	1	06459	Air Deflector.....	\$.23
2	2	01108	Air Deflector Screw.....	.06
3	2	0992	Air Deflector Screw Lockwasher.....	.02
4	1	06929	Body.....	2.90
5	1	*02531	Body Channel Welch Plug.....	.03
6	1	05591	Flange Gasket.....	.06
7	1	08215	Float.....	.30
8	2	*05425	Float Retaining Cotter Clip.....	.01
9	1	0164	Float Bowl Drain Plug.....	.06
10	1	0648	Float Bowl Drain Plug Gasket.....	.02
11	1	06882	Float Bowl Cover.....	.23
12	2	08315	Float Bowl Cover Screw & Lockwasher.....	.06
14	1	*06910	Idle Adjustment Screw.....	.23
15	1	*05725	Idle Adjustment Screw Spring.....	.06
16	1	*06905	Idle Tube.....	.45
17	1	*06941	Inlet Valve, Seat & Gasket.....	.90
18	1	0212	Inlet Valve Gasket.....	.02
19	1	*02395	Inlet Valve Channel Plug Screw.....	.06
20	1	*06921	Main Adjustment Screw.....	.45
21	1	0702	Main Adjustment Screw Gland.....	.30
22	1	0676	Main Adjustment Screw Gland Gasket.....	.02

Ref. No.	No. Req.	Part No.	Part Name	Price Each
23	1	0705	Main Adjustment Screw Packing.....	\$.06
24	1	0703	Main Adjustment Screw Packing Nut.....	.17
25	1	06923	Main Adjustment Knob.....	.23
26	1	*06924	Main Adjustment Acorn Nut.....	.12
27	1	*01675	Main Adjustment Acorn Nut Lockwasher.....	.02
28	1	*06903	Throttle Shaft.....	.30
29	1	*06332	Throttle Shutter.....	.12
30	1	*08317	Throttle Shutter Screw & Lockwasher.....	.06
31	1	*06634	Throttle Return Spring.....	.06
32	1	07000	Throttle Stop Lever.....	.30
33	1	* 051	Throttle Stop Lever Retaining Screw.....	.06
34	1	06918	Throttle Stop Pin.....	.06
35		*07082	Gasket & Packing Set.....	.20
36		08205	Repair Parts Kit.....	2.75

(*) Indicates contents of designated Repair Parts Kit

FUEL LEVEL: Is approximately correct when 1/16ths of an inch below bowl rim. Float is positioned on Valve Stem between 2 encircling slots and held by retainer clips. A constantly higher than normal level requires careful valve and seat cleaning or replacement. To replace Inlet Valve and Seat Assembly first remove Cover, Plug Screw and top Spring Cotter encircling valve. Force valve downward until parallel with float top then with thumb and forefinger draw valve through bottom of bowl. Float and lower Cotter Clip will fall from Bowl - socket wrench can now be used to easily remove valve seat.

ADJUSTMENT INSTRUCTIONS

Before starting engine check for proper fuel mixture supply in tank. Open Fuel Line Shut Off Valve and be certain air valve on Fuel Tank cap is open.

Separate manual carburetor adjustments are provided. Main Adjustment Screw (20) controlling power range mixture and Idle Adjustment Screw (14) governing idle mixture at closed throttle.

INITIAL ADJUSTMENT: Completely close Idle Adjustment Screw (14) by turning in (clockwise) until seated (without forcing) then turn back in opposite direction about one full turn. Proceed in like manner with Main Adjustment Screw (20) except open about one and one-half (1-1/2) turns after first being closed (if a numbered Main Adjustment Knob or Lever is being used open to number specified in Engine Manual or "RICH" position indicated on panel). Now choke and start engine in usual manner and run until thoroughly warm.

POWER RANGE ADJUSTMENT: With engine running at a constant speed of approximately one-third (1/3) open throttle position, slowly turn Main Adjustment Screw (20) inward by 1/4th steps (clockwise) until motor begins to lose speed, then turn back in opposite direction (in 1/8th turn steps) until maximum speed and power is obtained. This should then be the correct final Main Adjustment Screw setting.

IDLE MIXTURE ADJUSTMENT: This adjustment should only be made *AFTER* the above mentioned power range adjustment has been completed. With engine idling at closed throttle position (desired slowest speed), slowly turn Idle Adjustment Screw (14) inward (clockwise) until motor begins to lose speed and miss or flutter, then turn back in opposite direction (usually about 1/8th of a turn) until engine functions smoothly and steadily, which is then correct setting.

FINAL ADJUSTMENT: Alternately open and close throttle a few times for adjustment test. If acceleration hesitancy or stalling at idle speed occurs, entire adjustment procedure, outlined above, should be repeated. Warm Motor only requires opening of throttle and one or two vigorous pulls on starter rope, (choking not required unless previous experience indicates otherwise). Regardless of altitude or climatic conditions a proper carburetor adjustment can be made by following the above rules - which eliminates jet changes.

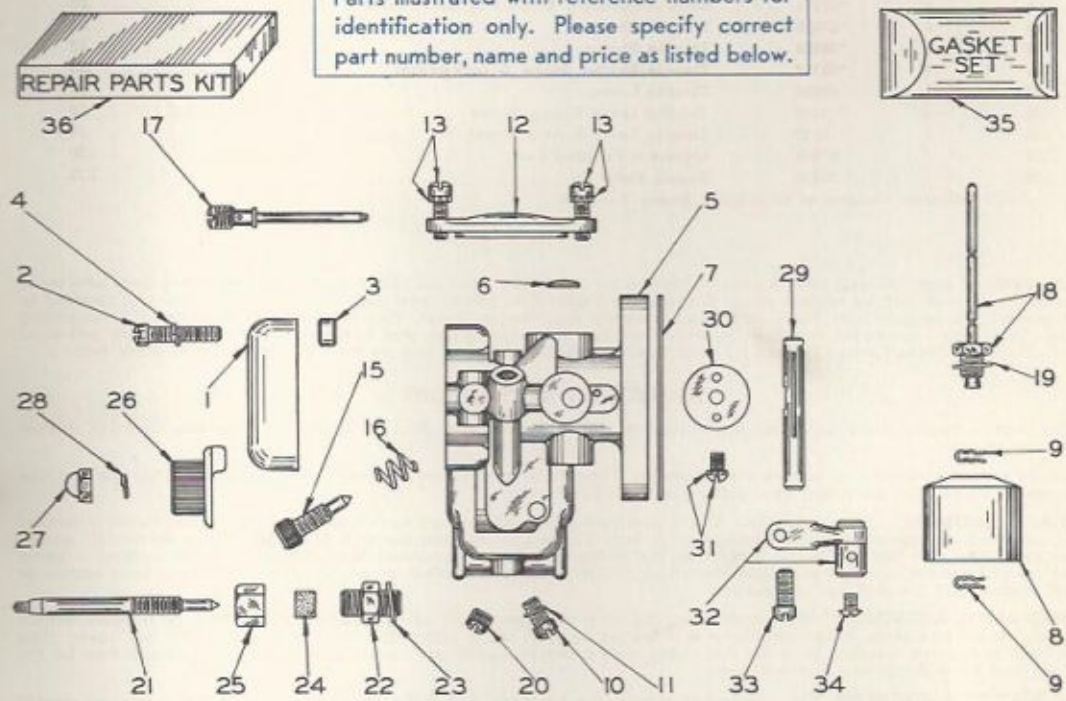
Revised 3/11/48

LIST PRICE: \$7.75

YEARS BUILT: 1941-42

CARBURETOR MODEL: AJ-9A

Parts illustrated with reference numbers for identification only. Please specify correct part number, name and price as listed below.



REF. NO.	NO. REQ.	PART NO.	PART NAME	PRICE EACH
1	1	06458	Air Deflector	\$.23
2	2	06807	Air Deflector Screw	.06
3	2	06975	Air Deflector Screw Spacer	.06
4	2	0992	Air Deflector Screw Lockwasher	.02
5	1	07023	Body	2.90
6	1	*02531	Body Channel Welch Plug	.03
7	1	05591	Flange Gasket	.06
8	1	08215	Float	.30
9	2	*05425	Float Retaining Cotter Clip	.01
10	1	0164	Float Bowl Drain Plug	.06
11	1	0648	Float Bowl Drain Plug Gasket	.02
12	1	06882	Float Bowl Cover	.23
13	2	08315	Float Bowl Cover Screw & Lockwasher	.06
14	1	*06910	Idle Adjustment Screw	.23
15	1	*05725	Idle Adjustment Screw Spring	.06
16	1	*06905	Idle Tube	.45
17	1	*06941	Inlet Valve, Seat & Gasket	.90
18	1	0212	Inlet Seat Gasket	.02
19	1	*02395	Inlet Valve Channel Plug Screw	.06

REF. NO.	NO. REQ.	PART NO.	PART NAME	PRICE EACH
21	1	*06921	Main Adjustment Screw	\$.45
22	1	0702	Main Adjustment Screw Gland	.30
23	1	0676	Main Adjustment Screw Gland Gasket	.02
24	1	0705	Main Adjustment Screw Packing	.06
25	1	0703	Main Adjustment Screw Packing Nut	.17
26	1	06923	Main Adjustment Knob	.23
27	1	*06924	Main Adjustment Acorn Nut	.12
28	1	*01675	Main Adjustment Acorn Nut Lockwasher	.02
29	1	*07018	Throttle Shaft	.30
30	1	*06984	Throttle Shutter	.12
31	1	*08317	Throttle Shutter Screw & Lockwasher	.06
32	1	06966	Throttle Lever	.45
33	1	* 0240	Throttle Lever Clamp Screw	.06
34	1	* 0120	Throttle Lever Swivel Screw	.06
35		*07082	Gasket & Packing Set	.20
36		08206	Repair Parts Kit	2.75

(*) Indicates contents of designated Repair Parts Kit

FUEL LEVEL: Is approximately correct when 11/16ths of an inch below bowl rim. Float is positioned on Valve Stem between 2 encircling slots and held by retainer clips. A constantly higher than normal level requires careful valve and seat cleaning or replacement. To replace Inlet Valve and Seat Assembly first remove Cover, Plug Screw and top Cotter Clip encircling valve. Force valve downward until parallel with Float Top then with thumb and forefinger draw valve through bottom of bowl. Float and lower Cotter Clip will fall from Bowl—socket wrench can now be used to easily remove valve seat.

ADJUSTMENT INSTRUCTIONS

Before starting engine check for proper fuel supply in tank, open Fuel Line Shut Off Valve and be certain air valve on Fuel Tank cap is open.

Separate manual carburetor adjustments are provided. Main Adjustment Screw (21) controlling power range mixture and Idle Adjustment Screw (15) governing idle mixture at CLOSED throttle.

INITIAL ADJUSTMENT: Completely close Idle Adjustment Screw (15) by turning in (clockwise) until seated (without forcing) then turn back in opposite direction about one full turn. Proceed in like manner with Main Adjustment Screw (21) except open about one and one-half (1-1/2) turns after first being closed (if a numbered Main Adjustment knob or lever is being used open to number specified in Engine Manual or "RICH" position indicated on panel). Now choke and start engine in usual manner and run until thoroughly warm.

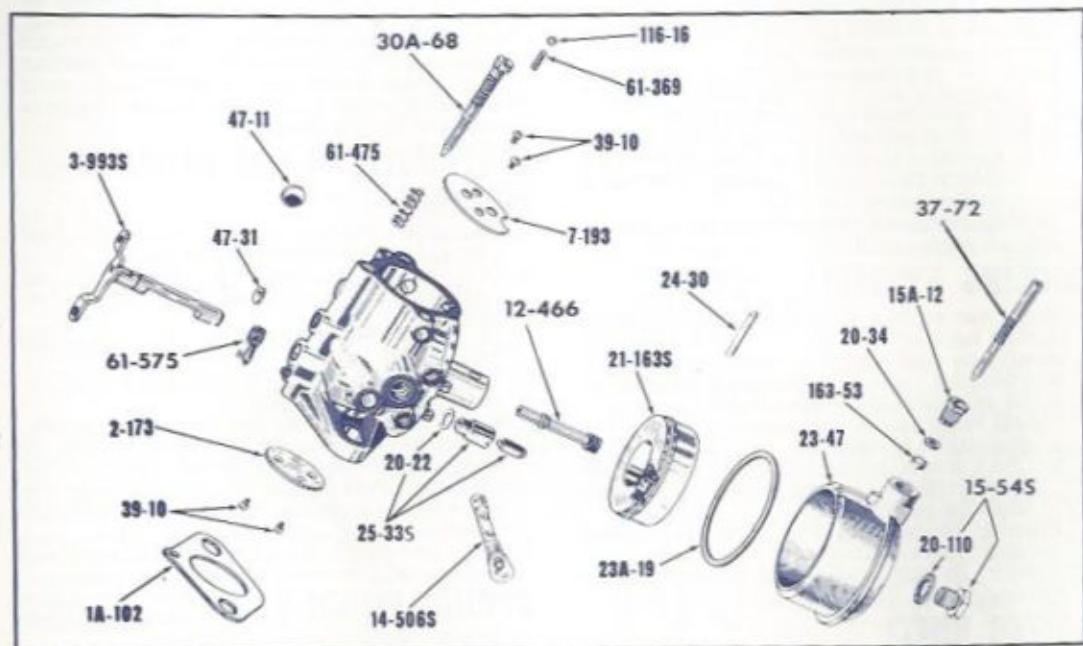
POWER RANGE ADJUSTMENT: With engine running at a constant speed of approximately one-third (1/3) open throttle position, slowly turn Main Adjustment Screw (21) inward by 1/4th steps (clockwise) until motor begins to lose speed, then turn back in opposite direction (in 1/8th turn steps) until maximum speed and power is obtained. This should then be the correct final Main Adjustment Screw Setting.

IDLE MIXTURE ADJUSTMENT: This adjustment should only be made AFTER the above mentioned power range adjustment has been completed. With engine idling at closed throttle position (desired slowest speed), slowly turn Idle Adjustment Screw (15) inward (clockwise) until motor begins to lose speed and miss or flutter, then turn back in opposite direction (usually about 1/8th of a turn) until engine functions smoothly and steadily, which is then correct setting.

FINAL ADJUSTMENT: Alternately open and close throttle a few times for adjustment test. If acceleration hesitancy or stalling at idle speed occurs, entire adjustment procedure, outlined above, should be repeated. Warm Motor only requires opening of throttle and one or two vigorous pulls on starter rope, (choking not required unless previous experience indicates otherwise). Regardless of altitude or climatic conditions a proper carburetor adjustment can be made by following the above rules — which eliminates jet changes.

Revised 4/15/48

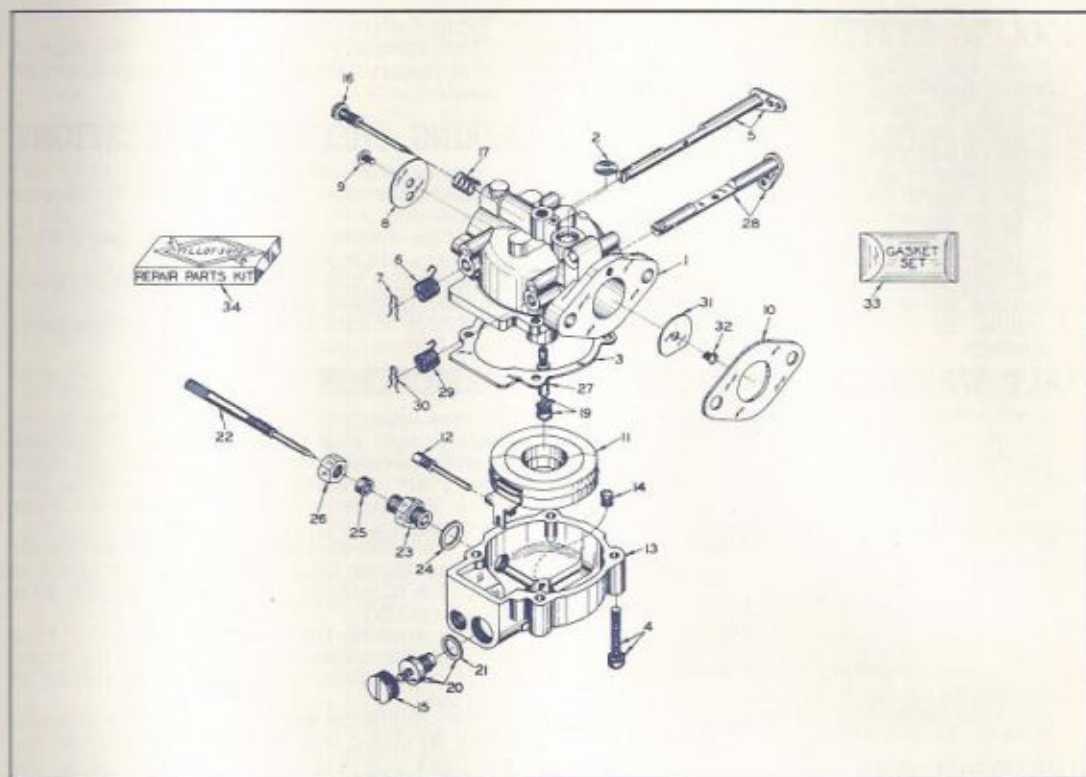
CARTER CARBURETOR MODEL N2439S



Part No.	Description
1A-102	Flange Gasket
2-173	Throttle Valve
3-993S	Throttle Shaft and Lever Assembly
7-193	Nozzle
12-466	Choke Lever and Shaft Assembly
14-506S	Choke Lever and Shaft Assembly
15-545	Bowl Nut Assembly
15A-12	Packing Nut
20-22	Needle Seat Gasket
20-34	Packing Nut Gasket
20-110	Bowl Nut Gasket
21-163S	Float and Lever Assembly
23-47	Bowl Nut Gasket

Part No.	Description
23A-19	Bowl Ring Gasket
24-30	Float Lever Pin
25-33S	Needle and Seat Assembly
30A-68	Idle Adjustment Screw
37-72	High Speed Adjusting Needle
39-10	Choke & Throttle Valve Attaching Screw (4)
47-11	Idle Port Welsh Plug
47-31	Idle Passage Welsh Plug
61-369	Choke Shaft Spring
61-475	Idle Adjustment Screw Spring
61-575	Needle and Seat Assembly
116-16	Choke Spring Ball
163-53	Main Metering Screw Packing

TILLOTSON CARBURETOR MODEL MD-66A

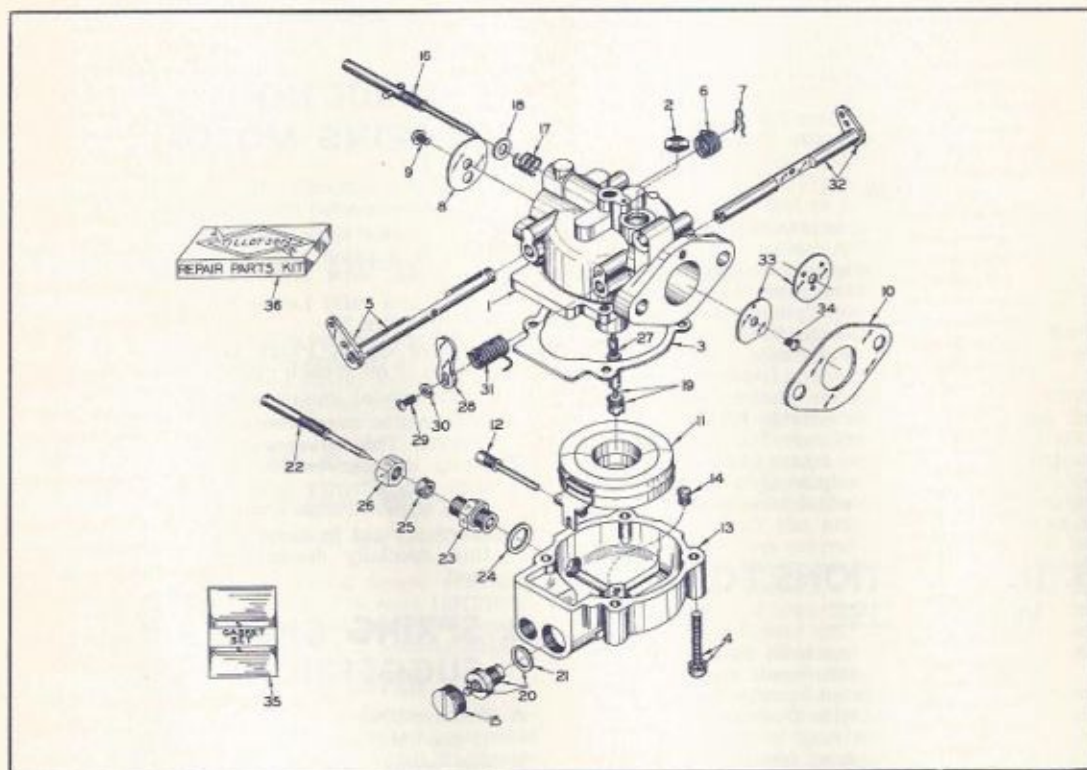


Ref. No.	Part No.	Part Name
1	09733	Body, Upper Half
2	*02531	Body Channel Welch Plug
3	07903	Body Gasket
4	06062	Body Retaining Screw and Lockwasher (4)
5	09725	Choke Shaft and Lever
6	07944	Choke Return Spring
7	08597	Choke Spring Retainer Clip
8	08862	Choke Shutter
9	05204	Choke Shutter Screw
10	05591	Flange Gasket
11	07804	Float
12	*07901	Float Lever Pinion Screw
13	08332	Fuel Bowl
14	*03311	Fuel Bowl Drain Screw (Small)
15	07896	Fuel Bowl Plug Screw (Large)
16	*010697	Idle Adjustment Screw
17	*08736	Idle Adjustment Screw Spring
19	*09720	Idle Tube and Plug Screw

Ref. No.	Part No.	Part Name
20	*07895	Inlet Needle, Seat and Gasket
21	02510	Inlet Seat Gasket
22	*09727	Main Adjustment Screw
23	0702	Main Adjustment Screw Gland
24	0676	Main Adjustment Screw Gland Gasket
25	09112	Main Adjustment Screw Packing
26	0703	Main Adjustment Screw Packing Nut
27	*08586	Main Nozzle
28	09723	Throttle Shaft and Lever
29	*07910	Throttle Return Spring
30	*08597	Throttle Spring Retainer Clip
31	09721	Throttle Shutter
32	*05204	Throttle Shutter Screw
33	*GS-110	GASKET and PACKING SET
34	RK-279	REPAIR PARTS KIT
	09730	Main Adjustment Screw Assembly

(*) Indicates contents of Repair Parts Kit

CARBURETOR MODEL MD-72A — STANDARD ON MODEL 3M-GS

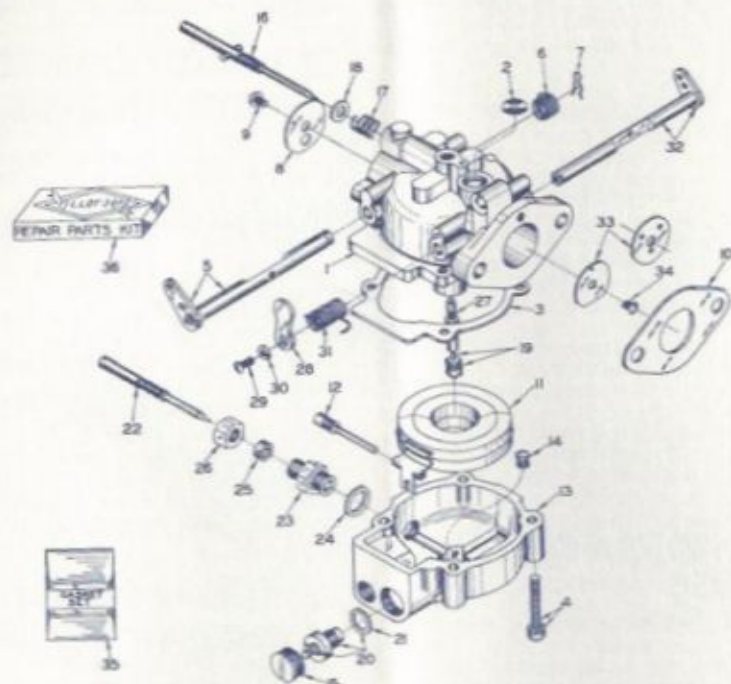


Ref. No.	Part No.	Req. No.	Description
1	09908	1	Body, Upper Half
2	*02531	1	Body Channel Welch Plug
3	07903	1	Body Gasket
4	06062	4	Body Retaining Screw and Lockwasher
5	09865	1	Choke Shaft and Lever
6	07910	1	Choke Shaft Return Spring
7	08597	1	Choke Shaft Return Spring Retaining Clip
8	08862	1	Choke Shutter
9	0120	1	Choke Shutter Screw
10	05591	1	Flange Gasket
11	07804	1	Float
12	*07901	1	Float Lever Pinion Screw
13	08332	1	Fuel Bowl
14	*03311	1	Fuel Bowl Drain Screw (Small)
15	07896	1	Fuel Bowl Drain Screw (Large)
16	*09868	1	Idle Adjustment Screw
17	*08736	1	Idle Adjustment Screw Spring
18	*06095	1	Idle Adjustment Screw Washer
19	*09720	1	Idle Tube and Plug Screw

Ref. No.	Part No.	Req. No.	Description
20	1	*07895	Inlet Needle Seat and Gasket
21	1	02510	Inlet Seat Gasket
22	1	*09869	Main Adjustment Screw
23	1	0702	Main Adjustment Screw Gland
24	1	0676	Main Adjustment Screw Gland Gasket
25	1	09112	Main Adjustment Screw Packing
26	1	0703	Main Adjustment Screw Packing Nut
27	1	*08586	Main Nozzle
28	1	09861	Throttle Lever
29	1	*06393	Throttle Lever Retaining Screw
30	1	*06396	Throttle Lever Retaining Screw Lockwasher
31	1	*08647	Throttle Return Spring
32	1	09863	Throttle Shaft and Lever
33	1	09907	Throttle Shutter
34	1	*05204	Throttle Shutter Screw
35	1	*09756	Gasket and Packing Set
36	1	RK109	Repair Parts Kit
		09900	Main Adjustment Screw Assembly
		3M402	Carburetor

(* Indicates contents of REPAIR PARTS KIT

CARBURETOR MODEL MD-73A — STANDARD ON MODEL 4M-GS

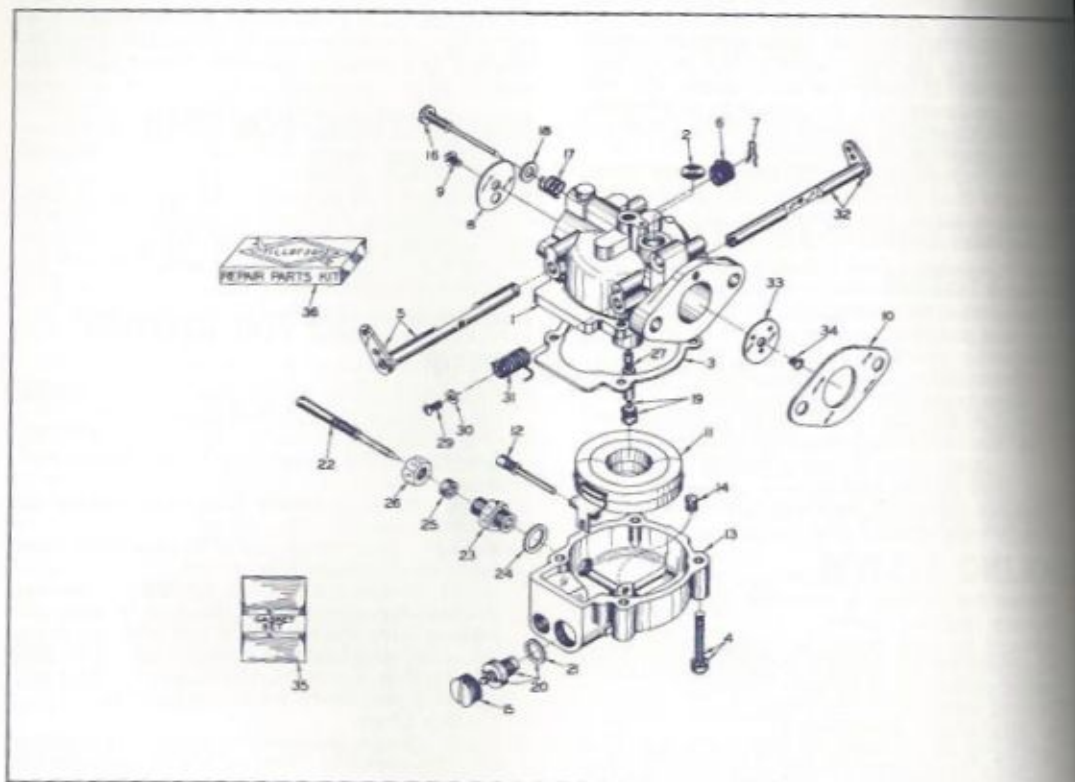


Ref. No.	Part No.	Req. No.	Description
1	1	09911	Body, Upper Half
2	1	*02531	Body Channel Welch Plug
3	1	07903	Body Gasket
4	4	06062	Body Retaining Screw and Lockwasher
5	1	09865	Choke Shaft and Lever
6	1	07910	Choke Shaft Return Spring
7	1	08597	Choke Shaft Return Spring Retaining Clip
8	1	08862	Choke Shutter
9	1	0120	Choke Shutter Screw
10	1	05591	Flange Gasket
11	1	07804	Float
12	1	*07901	Float Lever Pinion Screw
13	1	08332	Fuel Bowl
14	1	*03311	Fuel Bowl Drain Screw (Small)
15	1	07896	Fuel Bowl Drain Screw (Large)
16	1	*09868	Idle Adjustment Screw
17	1	*08736	Idle Adjustment Screw Spring
18	1	*06095	Idle Adjustment Screw Washer
19	1	*09720	Idle Tube and Plug Screw

Ref. No.	Part No.	Req. No.	Description
20	1	*07895	Inlet Needle Seat and Gasket
21	1	02510	Inlet Seat Gasket
22	1	*09869	Main Adjustment Screw
23	1	0702	Main Adjustment Screw Gland
24	1	0676	Main Adjustment Screw Gasket
25	1	09112	Main Adjustment Screw Packing
26	1	0703	Main Adjustment Screw Packing Nut
27	1	*09910	Main Nozzle
28	1	09861	Throttle Lever
29	1	*06393	Throttle Lever Retaining Screw
30	1	*06396	Throttle Lever Retaining Screw Lockwasher
31	1	*08647	Throttle Return Spring
32	1	09863	Throttle Shaft and Lever
33	1	06888	Throttle Shutter
34	1	*05204	Throttle Shutter Screw
35	1	*09756	Gasket and Packing Set
36	1	RK-110	Repair Parts Kit
		09900	Main Adjustment Screw Assembly
		4M402	Carburetor

(*) Indicates contents of REPAIR PARTS KIT

TILLOTSON CARBURETOR MODEL MD-72



Ref.

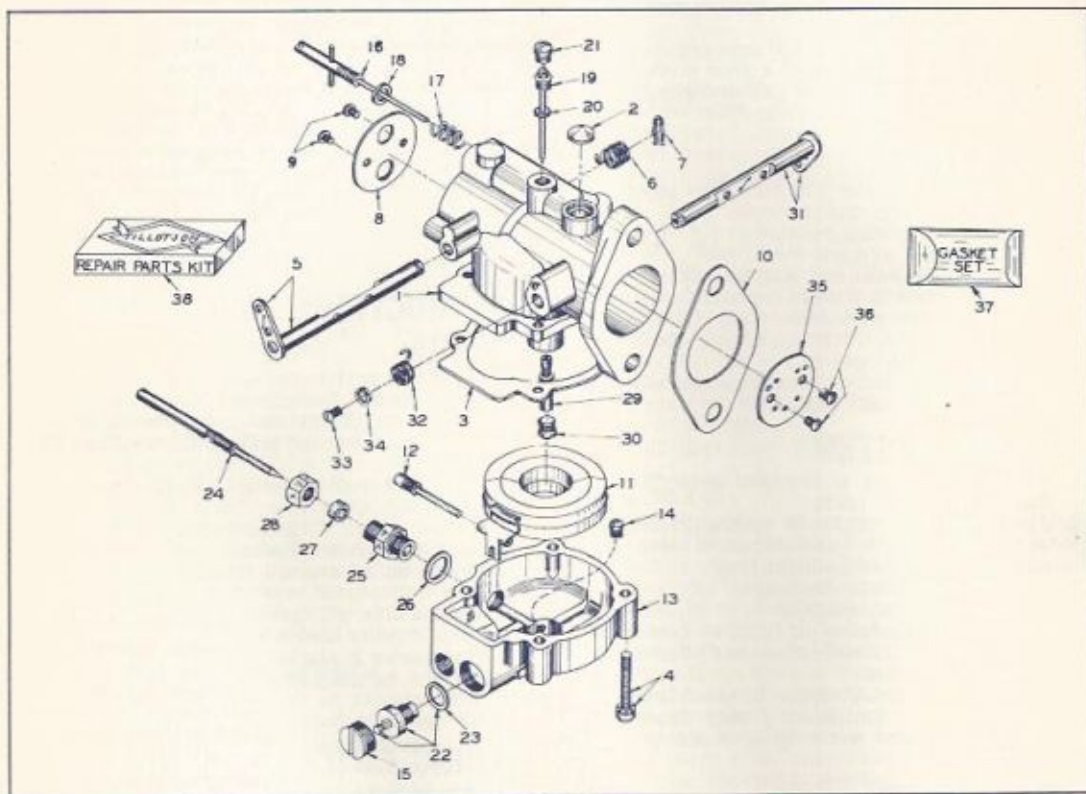
No.	Part No.	Description
1	010708	Body, Upper Half
2	*02531	Body Channel Welch Plug
3	07903	Body Gasket
4	06062	Body Ret. Screw and Lockwasher (4)
5	09865	Choke Shaft and Lever
6	07910	Choke Shaft Return Spring
7	08597	Choke Shaft Return Spring
8	08862	Choke Shutter
9	0120	Choke Shutter Screw
10	05591	Flange Gasket
11	07804	Float
12	*07901	Float Lever Pinion Screw
13	08332	Fuel Bowl
14	*03311	Fuel Bowl Drain Screw (Small)
15	07896	Fuel Bowl Drain Screw (Large)
16	*010697	Idle Adjustment Screw
17	*08736	Idle Adjustment Screw Spring
18	*None	Idle Adjustment Screw Washer
19	609720	Idle Tube and Plug Screw

Ref.

No.	Part No.	Description
20	*07895	Inlet Needle, Seat and Gasket
21	02510	Inlet Seat Gasket
22	*09869	Main Adjustment Screw
23	0702	Main Adjustment Screw Gland
24	0676	Main Adjustment Screw Gland Gasket
25	09112	Main Adjustment Screw Packing
26	0703	Main Adjustment Screw Packing Nut
27	*09910	Main Nozzle
28	None	Throttle Lever
29	*06393	Throttle Lever Retaining Screw
30	*06396	Throttle Lever Retaining Screw Lockwasher
31	*08647	Throttle Return Spring
32	09863	Throttle Shaft and Lever
33	09888	Throttle Shutter
34	*05204	Throttle Shutter Screw
35	*GS-110	Gasket and Packing Set
36	RK-304	Repair Parts Kit
	09870	Main Adjustment Screw Assembly

(*) Indicates contents of Repair Parts Kit

TILLOTSON CARBURETOR MODEL MD-84A



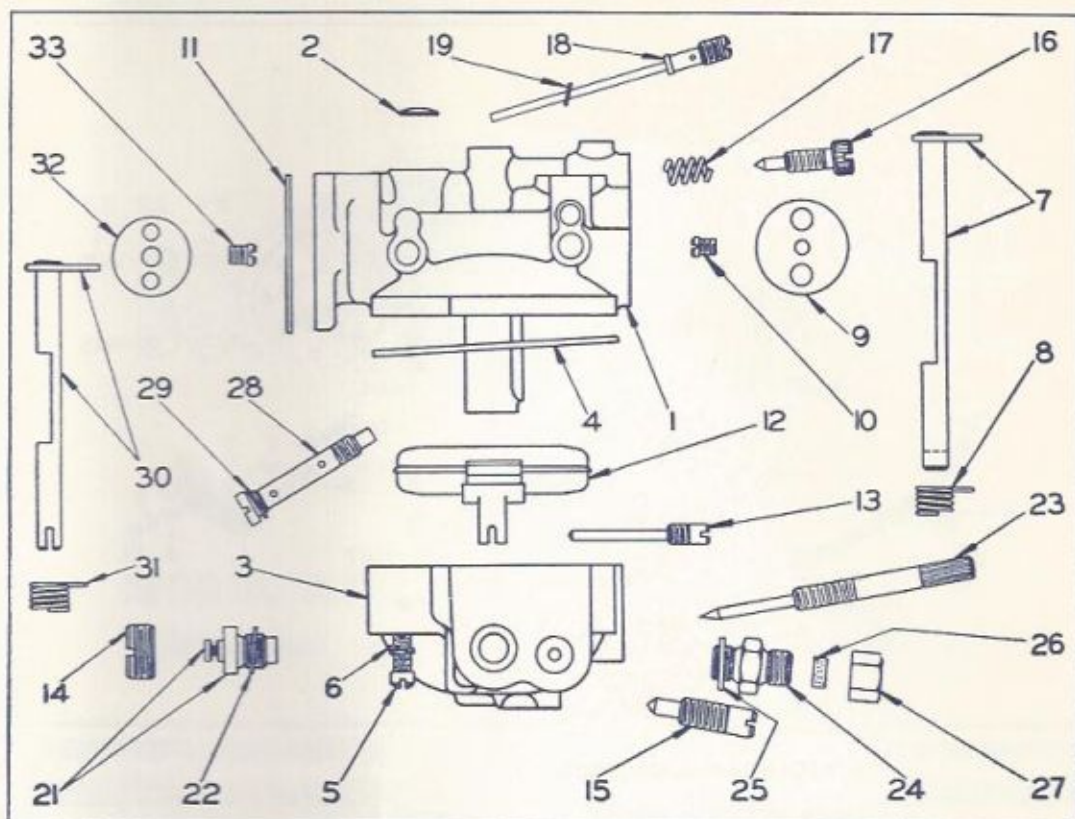
Ref. No.	No.	Req.	Part No.	Description
1	1		010164	Body, Upper Half
2	1		*02531	Body Channel Welch Plug
3	1		07903	Body Gasket
4	4		06062	Body Retaining Screw & Lockwasher
5	1		010157	Choke Shaft and Lever
6	1		07910	Choke Shaft Return Spring
7	1		08597	Choke Shaft Return Spring Retaining Clip
8	1		09079	Choke Shutter
9	2		05204	Choke Shutter Screws
10	1		06833	Flange Gasket
11	1		07804	Float
12	1		*07901	Float Lever Pinion Screw
13	1		08332	Fuel Bowl
14	1		03311	Fuel Bowl Drain Screw (Small)
15	1		07896	Fuel Bowl Plug Screw (Large)
16	1		*010153	Idle Adjustment Screw
17	1		*05725	Idle Adjustment Screw Spring
18	1		06095	Idle Adjustment Screw Spring Washer
19	1		*010154	Idle Tube

(*) Indicates contents of repair parts kit

Ref. No.	No.	Req.	Part No.	Description
20	1		06569	Idle Tube Gasket
21	1		*02395	Idle Tube Channel Plug Screw
22	1		*07895	Inlet Needle, Seat and Gasket
23	1		02510	Inlet Seat Gasket
24	1		*010162	Main Adjustment Screw
25	1		0702	Main Adjustment Screw Gland
26	1		0676	Main Adjustment Screw Gland Gasket
27	1		09112	Main Adjustment Screw Packing Nut
28	1		0703	Main Adjustment Screw Packing Nut
29	1		*010146	Main Nozzle
30	1		01102	Main Nozzle Channel Plug Screw
31	1		010163	Throttle Shaft and Lever
32	1		*08647	Throttle Shaft Return Spring
33	1		*06393	Throttle Cam Lever Retaining Screw
34	1		*06396	Throttle Cam Lever Retaining Screw Lockwasher
35	1		010145	Throttle Shutter
36	2		*05204	Throttle Shutter Screws
37			*09330	GASKET AND PACKING SET
38			RK-139	REPAIR PARTS KIT

BE SURE TO GIVE SERIAL NUMBER OF MOTOR WHEN ORDERING PARTS

CARBURETOR MODEL ME-1A—STANDARD ON MODEL 2-J

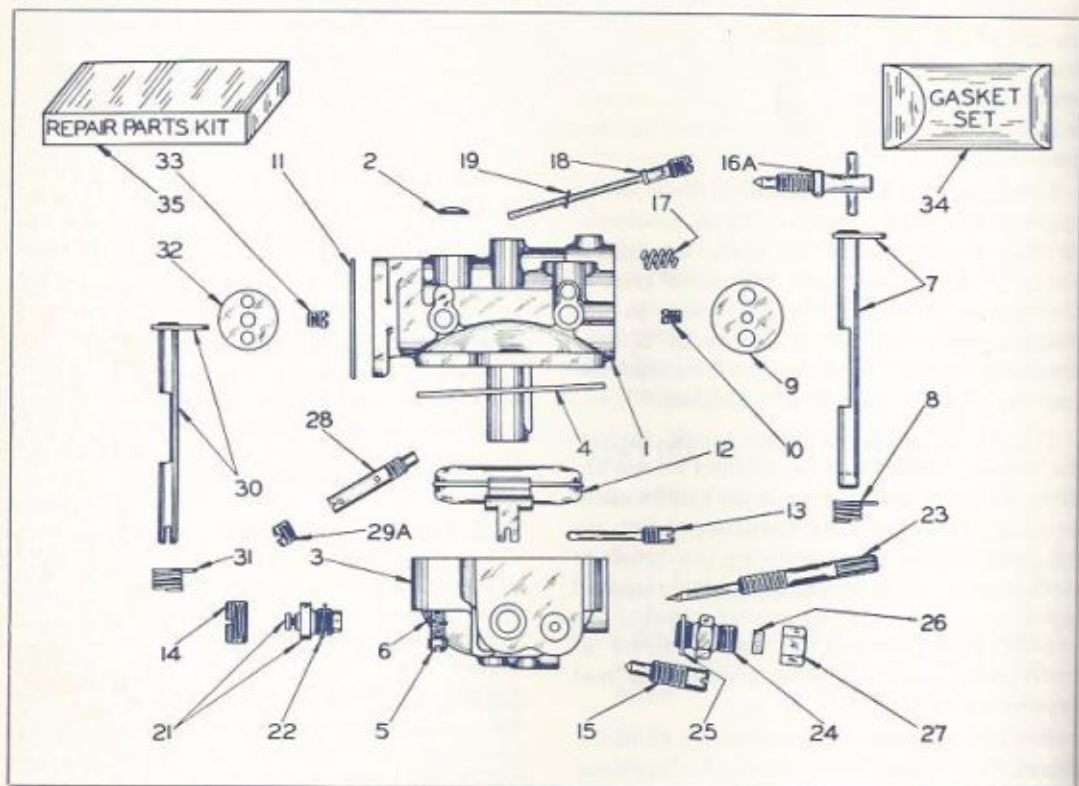


Ref. No.	Part No.	No. Req.	Description
1	07955	1	Body, Upper Half
2	*02531	1	Body Channel Welch Plug
3	07953	1	Fuel Bowl
4	07951	1	Body Gasket
5	06062	4	Body Retaining Screw
6	0992	4	Body Retaining Screw Lockwasher
7	07946	1	Choke Shaft and Lever
8	*07910	1	Choke Return Spring
9	03739	1	Choke Shutter
10	05430	1	Choke Shutter Screw
11	05891	1	Flange Gasket
12	07804	1	Float
13	*07901	1	Float Lever Pinion Screw
14	07896	1	Fuel Bowl Plug Screw (Large)
15	*07952	1	Fuel Bowl Drain Valve
16	*06910	1	Idle Adjustment Screw
17	*05725	1	Idle Adjustment Screw Spring

Ref. No.	Part No.	No. Req.	Description
18	*07938	1	Idle Tube
19	07900	1	Idle Tube Gasket
21	*07895	1	Inlet Needle, Seat and Gasket
22	02510	1	Inlet Seat Gasket
23	*08156	1	Main Adjustment Screw
24	0702	1	Main Adjustment Screw Gland
25	0576	1	Main Adjustment Screw Gland Gasket
26	0705	1	Main Adjustment Screw Packing
27	0703	1	Main Adjustment Screw Packing Nut
28	*07959	1	Main Nozzle
29	02658	1	Main Nozzle Gasket
30	07943	1	Throttle Shaft and Lever
31	*07944	1	Throttle Return Spring
32	07960	1	Throttle Shutter
33	*05430	1	Throttle Shutter Screw
	*08175		Gasket and Packing Set
	08176		Repair Parts Kit
	1J402		Carburetor

(*) Identifies Parts Included in Part No. 08176 Repair Parts Kit.

CARBURETOR MODEL ME-1B—STANDARD ON MODEL 2K

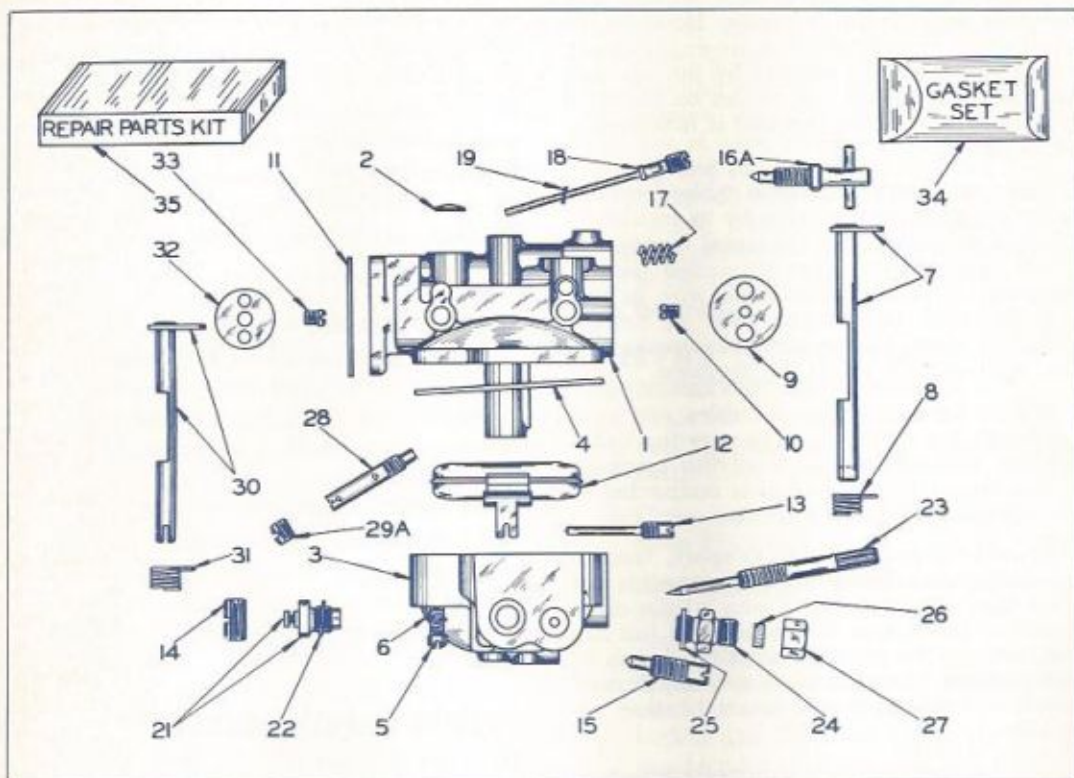


Ref. No.	Part No.	No. Req.	Description
1	08368	1	Body, Upper Half
2	*02531	1	Body Channel Welch Plug
3	07953	1	Fuel Bowl
4	07951	1	Body Gasket
5	06062	4	Body Retaining Screw
6	0992	4	Body Retaining Screw Lockwasher
7	07946	1	Choke Shaft and Lever
8	*07910	1	Choke Return Spring
9	05088	1	Choke Shutter
10	05430	1	Choke Shutter Screw
11	08591	1	Flange Gasket
12	07804	1	Float
13	*07901	1	Float Lever Pinion Screw
14	07896	1	Fuel Bowl Plug Screw (Large)
15	*07952	1	Fuel Bowl Drain Valve
16A	*08379	1	Idle Adjustment Screw
17	*05725	1	Idle Adjustment Screw Spring
18	*07938	1	Idle Tube

Ref. No.	Part No.	No. Req.	Description
19	07900	1	Idle Tube Gasket
21	*07895	1	Inlet Needle, Seat and Gasket
22	02510	1	Inlet Seat Gasket
23	*08156	1	Main Adjustment Screw
24	0702	1	Main Adjustment Screw Gland
25	0676	1	Main Adjustment Screw Gland Gasket
26	0705	1	Main Adjustment Screw Packing
27	0703	1	Main Adjustment Screw Packing Nut
28	*07922	1	Main Nozzle
29A	02395	1	Main Nozzle Channel Plug Screw
30	07943	1	Throttle Shaft and Lever
31	*07944	1	Throttle Return Spring
32	08364	1	Throttle Shutter
33	*05430	1	Throttle Shutter Screw
34	*08415		Gasket and Packing Set
35	08416		Repair Parts Kit
	1J-402		Carburetor
	08150		Main Adjustment Screw Assembly

(*) Indicates Contents of Designated Repair Parts Kit

CARBURETOR MODEL ME-2A—STANDARD ON MODEL 4K



Ref. No.	Part No.	No. Req.	Description	Ref. No.	Part No.	No. Req.	Description
1	08375	1	Body, Upper Half	19	07900	1	Idle Tube Gasket
2	*02531	1	Body Channel Welch Plug	21	*08018	1	Inlet Needle, Seat and Gasket
3	07953	1	Fuel Bowl	22	02510	1	Inlet Seat Gasket
4	07951	1	Body Gasket	23	*08156	1	Main Adjustment Screw
5	06062	4	Body Retaining Screw	24	0702	1	Main Adjustment Screw Gland
6	0992	4	Body Retaining Screw Lockwasher	25	0676	1	Main Adjustment Screw Gland Gasket
7	07946	1	Choke Shaft and Lever	26	0705	1	Main Adjustment Screw Packing
8	*07910	1	Choke Return Spring	27	0703	1	Main Adjustment Screw Packing Nut
9	03739	1	Choke Shutter	28	*08179	1	Main Nozzle
10	05430	1	Choke Shutter Screw	29A	02395	1	Main Nozzle Channel Plug Screw
11	08991	1	Flange Gasket	30	07943	1	Throttle Shaft and Lever
12	07804	1	Float	31	*07944	1	Throttle Return Spring
13	*07901	1	Float Lever Pinion Screw	32	08364	1	Throttle Shutter
14	07896	1	Fuel Bowl Plug Screw (Large)	33	*05430	1	Throttle Shutter Screw
15	*07952	1	Fuel Bowl Drain Valve	34	*08415		Gasket and Packing Set
16A	*08381	1	Idle Adjustment Screw	35	08417		Repair Parts Kit
17	*05725	1	Idle Adjustment Screw Spring		4K-402		Carburetor
18	*08515	1	Idle Tube		08150		Main Adjustment Screw Assembly

(*) Indicates Contents of Designated Repair Parts Kit