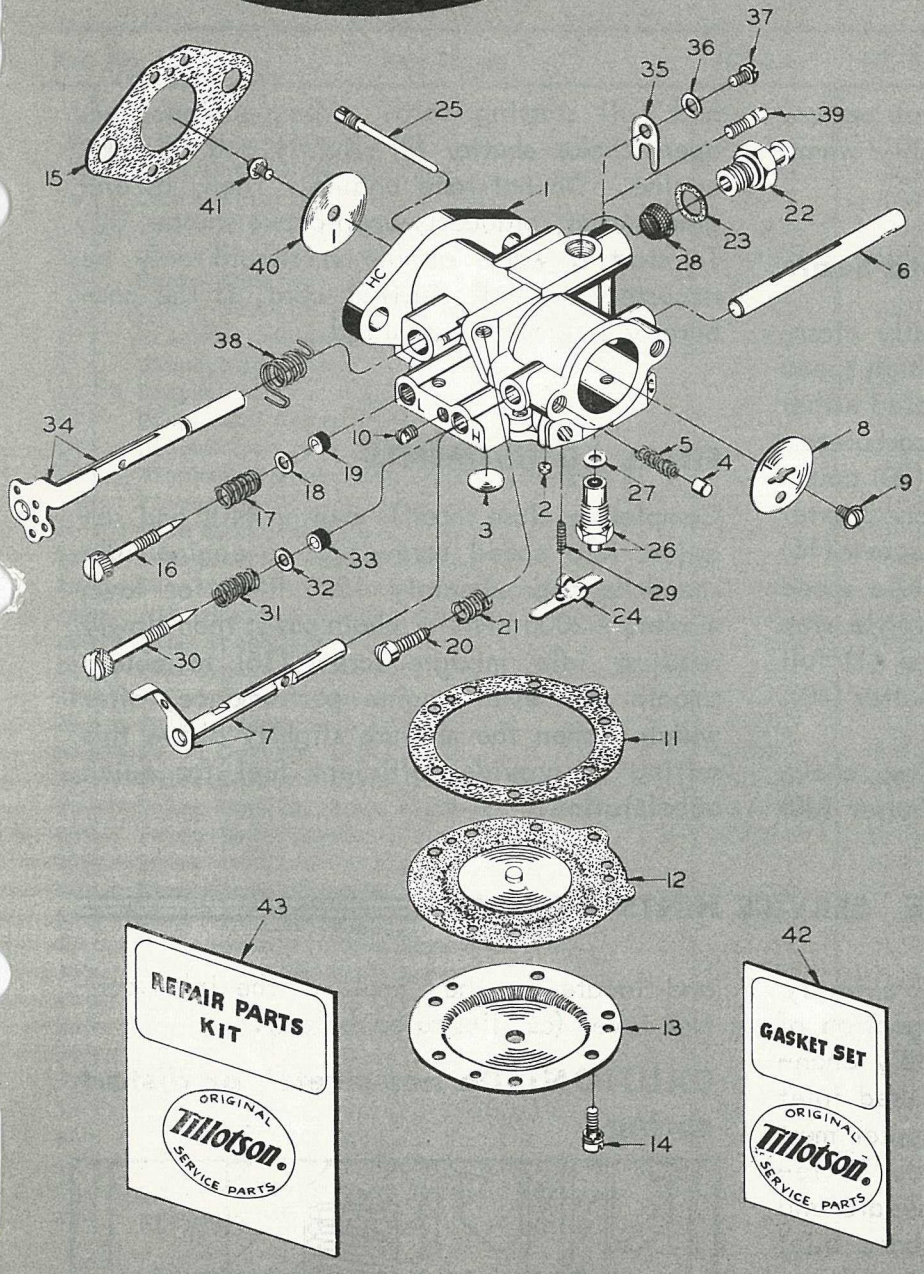
Tillotson® HC Series Carburetors

PARTS LIST SECTION

Illustrations of Basic Parts standard throughout HC Series Carburetor.



Ref. No.	Part Name
1	Body (Service)
2	Body Channel Cup Plug
3	Body Channel Welch Plug
4	Choke Friction Pin
5	Choke Friction Spring
6	Choke Shaft
7	Choke Shaft & Lever
8	Choke Shutter
9	Choke Shutter Screw & Lockwasher
10	Diaphragm Chamber Drain Screw
11	Diaphragm Gasket
12	Diaphragm
13	Diaphragm Cover Plate
14	Diaphragm Cover Retaining Screw (6)
15	Flange Gasket
16	Idle Mixture Screw
17	Idle Mixture Screw Spring
18	Idle Mixture Screw Washer
19	Idle Mixture Screw Packing
20	Idle Speed Screw
21	Idle Speed Screw Spring
22	Inlet Connection
23	Inlet Connection Gasket
24	Inlet Control Lever
25	Inlet Control Lever Pinion Screw
26	Inlet Needle, Seat & Gasket
27	Inlet Seat Gasket
28	Inlet Screen
29	Inlet Tension Spring
30	High Speed Mixture Screw
31	High Speed Mixture Screw Spring
32	High Speed Mixture Screw Washer
33	High Speed Mixture Screw Packing
34	Throttle Shaft & Lever
35	Throttle Shaft Clip
36	Throttle Shaft Clip Lockwasher
37	Throttle Shaft Clip Retaining Screw
38	Throttle Shaft Return Spring
39	Throttle Shaft Return Spring Anchor Pin
40	Throttle Shutter
41	Throttle Shutter Screw & Lockwasher
42	Gasket & Packing Set
43	Repair Parts Kit

Parts illustrated are typical in appearance, and may not look exactly like the part required.

FOR INDIVIDUAL MODEL LISTINGS SEE FOLLOWING PAGES

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Tillotson

HC SERIES

ADJUSTMENT INSTRUCTIONS

To properly adjust carburetor for best performance, the engine must be thoroughly warm.

INITIAL ADJUSTMENTS:

Do Not Force Adjustments Into Seats

To start a cold engine, first carefully close, by turning clockwise, both idle and high speed mixture screws (16 and 30) -- located either below air horn or at left side of carburetor. Now open high speed mixture screw (30) counterclockwise approximately one and one quarter (1-1/4) turns. Open idle mixture screw (16) three quarters (3/4) turn. Back idle speed screw (20) off its contact with throttle stop lever; then turn it inward about one (1) full turn so as to slightly open throttle shutter (40).

Open fuel line shut off valve, close choke shutter (8), partly open throttle shutter (40) and pull starting cord. When engine fires, open choke shutter (8) slightly and idle the engine. Do not race engine. Then, as engine warms, gradually open choke shutter (8). To start a warm engine it should only be necessary to pull starting cord, if the carburetor is properly adjusted.

FINAL ADJUSTMENTS

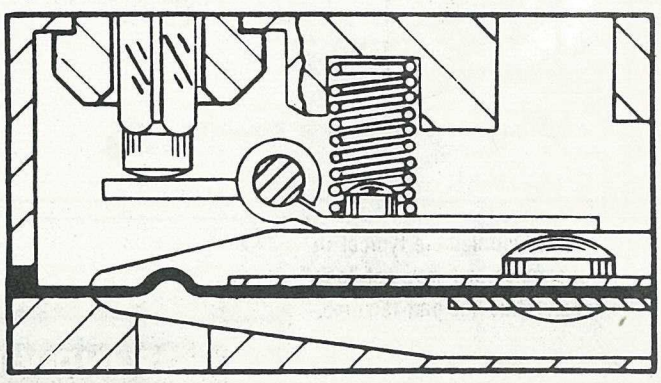
Completely close throttle shutter (40) and readjust idle speed screw (20) so engine idle speed is approximately 1200 RPM for lawn mowers - 2000 RPM for chain saws; then slowly readjust idle mixture screw (16) to obtain smooth and even engine performance, after which richen the mixture slightly above this setting to provide sufficient fuel for quick acceleration.

SERVICE HINTS

If and when necessary to remove previously installed inlet seat (for possible inspection of same and cleaning of fuel inlet supply channel) always be certain to remove used inlet seat copper gasket. New copper gasket must be used when re-installing inlet seat or replacing with complete new inlet needle and seat assembly. CAUTION - The brass inlet seat should not be excessively tightened.

When reassembling the inlet control lever and spring, care should be taken to see that the spring rests in the well of the metering body and locates on the dimple of the inlet control lever (as illustrated below).

CAUTION: Do not stretch or distort spring.



Tillotson CARBURETORS and FUEL & STRAINERS

Carburetor Model	Year Built	Superseding Model	Equipment
HC-1A	1958-60		Mono Chain Saw
HC-2A	1958-61		Power Products Type 1137
HC-4A	1958-59		Power Products Type 1132
HC-5A	1958-60		Power Products Type 615-17
HC-6A	1959-60		Power Products Type 1152-1153

BASIC PARTS ILLUSTRATIONS:

• See Front Page for illustrations corresponding to reference numbers in list below.

Ref. No.	Part Name	HC-1A	HC-2A	HC-4A	HC-5A	HC-6A
1	Body (Service)	011501	011506	011552	011719	011834
2	* Body Channel Cup Plug	010588	010588	010588	010588	010588
3	* Body Channel Welch Plug	02531	02531	02531	02531	02531
4	Choke Friction Pin	05454	05454	05454	05454	05454
5	Choke Friction Spring	08805	08805	08805	08805	08805
7	Choke Shaft & Lever	010831	010831	010831	010831	010831
8	Choke Shutter	09626	09626	09626	09626	09626
9	Choke Shutter Screw & Lockwasher	08942	08942	08942	08942	08942
10	Diaphragm Chamber Drain Screw	02232	02232	02232	02232	02232
11	Diaphragm Gasket	012473	012473	012473	012473	012473
12	* Diaphragm	012475	012475	012475	012475	012475
13	Diaphragm Cover Plate	011418	011418	011418	011418	011418
14	Diaphragm Cover Ret. Screw (6)	011441	011441	011441	011441	011441(4)
14	Diaphragm Cover Ret. Screw (Long) (2)	----	----	----	----	09689
15	Flange Gasket	010730	010730	010730	010730	010730
16	* Idle Mixture Screw	011498	011498	011498	011435	011435
17	* Idle Mixture Screw Spring	08793	08793	08793	08793	08793
18	Idle Mixture Screw Washer	011428	011428	011428	011428	011428
19	Idle Mixture Screw Packing	011401	011401	011401	011401	011401
20	* Idle Speed Screw	05095	05095	05095	05095	05095
21	* Idle Speed Screw Spring	0788	0788	0788	0788	0788
22	Inlet Connection	011497	011497	011497	011497	011497
23	Inlet Connection Gasket	02510	02510	02510	02510	02510
24	* Inlet Control Lever	010513	010513	010513	010513	010513
25	* Inlet Control Lever Pinion Screw	010581	010581	010581	010581	010581
26	* Inlet Needle, Seat & Gasket	012384	012384	012384	012384	012384
27	Inlet Seat Gasket	010165	010165	010165	010165	010165
29	* Inlet Tension Spring	010578	010578	010578	010578	010578
30	* High Speed Mixture Screw	011494	011494	011494	011718	011718
31	* High Speed Mixture Screw Spring	08793	08793	08793	08793	08793
32	High Speed Mixture Screw Washer	011428	011428	011428	011428	011428
33	High Speed Mixture Screw Packing	011401	011401	011401	011401	011401
34	Throttle Shaft & Lever	012106	011500	011533	011500	011500
35	Throttle Shaft Clip	09678	09678	09678	09678	09678
36	Throttle Shaft Clip Lockwasher	0992	0992	0992	0992	0992
37	Throttle Shaft Clip Ret. Screw	01974	01974	01974	01974	01974
38	* Throttle Shaft Return Spring	010775	010775	011568	011568	010775
40	Throttle Shutter	08646	08646	08646	04119	08646
41	* Throttle Shutter Screw & Lockwasher	08942	08942	08942	08942	08942
42	* **GASKET & PACKING SET**	GS-144	GS-144	GS-144	GS-144	GS-144
43	**REPAIR PARTS KIT**	RK-377	RK-377	RK-380	RK-393	RK-407

(*) **Indicates contents of Repair Parts Kit.**

TILLOTSON MANUFACTURING CO.
PARTS AND SERVICE DIVISION
TOLEDO, OHIO 43612

Tillotson CARBURETORS and FUEL STRAINERS

BASIC PARTS ILLUSTRATIONS:

• See Front Page for illustrations corresponding to reference numbers in list below.

Carburetor Model	Year Built	Superseding Model	Equipment
HC-7A.	1959-61		Power Products Type 1169
HC-8A.	1959-60	HC-9A	Scott, Firestone, Elgin, McCulloch
HC-8AX	1960	HC-9A	Scott, Firestone, Elgin, McCulloch
HC-9A	1961		Scott, Firestone, Elgin, McCulloch
HC-11A	1961-65		Clinton Chain Saw
HC-13A	1963-66		McCulloch Chain Saw
HC-16A	1966		McCulloch

Ref. No.	Part Name	HC-7A	HC-8A HC-8AX HC-9A	HC-11A	HC-13A (No RK Available)	HC-16A
1	Body (Service)	011869	----	012569	013088	014399
2	* Body Channel Cup Plug	010588	010588	010588(2)	010588	010588(2)
3	* Body Channel Welch Plug	02531	02531	02531	02531	02531
4	Choke Friction Pin	05454	----	05454	05454	05454
5	Choke Friction Spring	08805	----	08805	08805	08805
7	Choke Shaft & Lever	011383	----	012206	013087	013087
8	Choke Shutter	09626	011976	011883	011883	011883
10	Diaphragm Chamber Drain Screw	02232	02232	02232	02232	02232
11	Diaphragm Gasket	012473	012473	012473	012473	012473
12	* Diaphragm	012475	#012350	012475	012475	012475
13	Diaphragm Cover Plate	011418	011418	011418	011418	011418
14	Diaphragm Cover Ret. Screw (6)	011441	09689	011441	011441	011441
15	Flange Gasket	010730	010730	010730	010730	010730
16	* Idle Mixture Screw	011498	011986	011498	013206	013206
17	* Idle Mixture Screw Spring	08793	08793	08793	08793	08793
18	Idle Mixture Screw Washer	011428	011428	011428	011428	011428
19	Idle Mixture Screw Packing	011401	011401	011401	011401	011401
20	* Idle Speed Screw	05095	----	05095	05095	05095
21	* Idle Speed Screw Spring	0788	----	0788	0788	0788
22	Inlet Connection	011497	----	----	011497	----
23	Inlet Connection Gasket	02510	----	----	013094	----
24	* Inlet Control Lever	010513	#012348	010513	010513	010513
25	* Inlet Control Lever Pinion Screw	010581	010581	010581	010581	010581
26	* Inlet Needle, Seat & Gasket	012384	011499	010580	013095	014398
27	Inlet Seat Gasket	010165	010165	010165	010165	012656
28	* Inlet Screen	----	011493	012727	011493	----
29	* Inlet Tension Spring	010578	#010578	010578	010578	010578
30	* High Speed Mixture Screw	011494	011983	011510	013205	013205
31	* High Speed Mixture Screw Spring	08793	08793	08793	08793	08793
32	High Speed Mixture Screw Washer	011428	011428	011428	011428	011428
33	High Speed Mixture Screw Packing	011401	011401	011401	011401	011401
34	Throttle Shaft & Lever	011500	011985	012795	011500	011500
35	Throttle Shaft Clip	09678	----	09678	09678	09678
36	Throttle Shaft Clip Lockwasher	0992	----	0992	0992	0992
37	Throttle Shaft Clip Ret. Screw	01974	----	01974	01974	01974
38	* Throttle Shaft Return Spring	010775	011586	010775	010775	010775
40	Throttle Shutter	08646	011984	08646	08646	08646
41	* Throttle Shutter Screw & Lockwasher	08942	05204	08942	08942	08942
42	* **GASKET & PACKING SET**	GS-144	GS-144	GS-144	GS-166	GS-200
43	**REPAIR PARTS KIT**	RK-377	RK-436	RK-500	RK-569	RK-762

DG-3HL

(*) **Indicates contents of Repair Parts Kit.**

(#) **When using new style 012350 Diaphragm be sure to install new style 012348 Control Lever and 010578 Control Spring.**

TILLOTSON MANUFACTURING CO.

PARTS AND SERVICE DIVISION

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