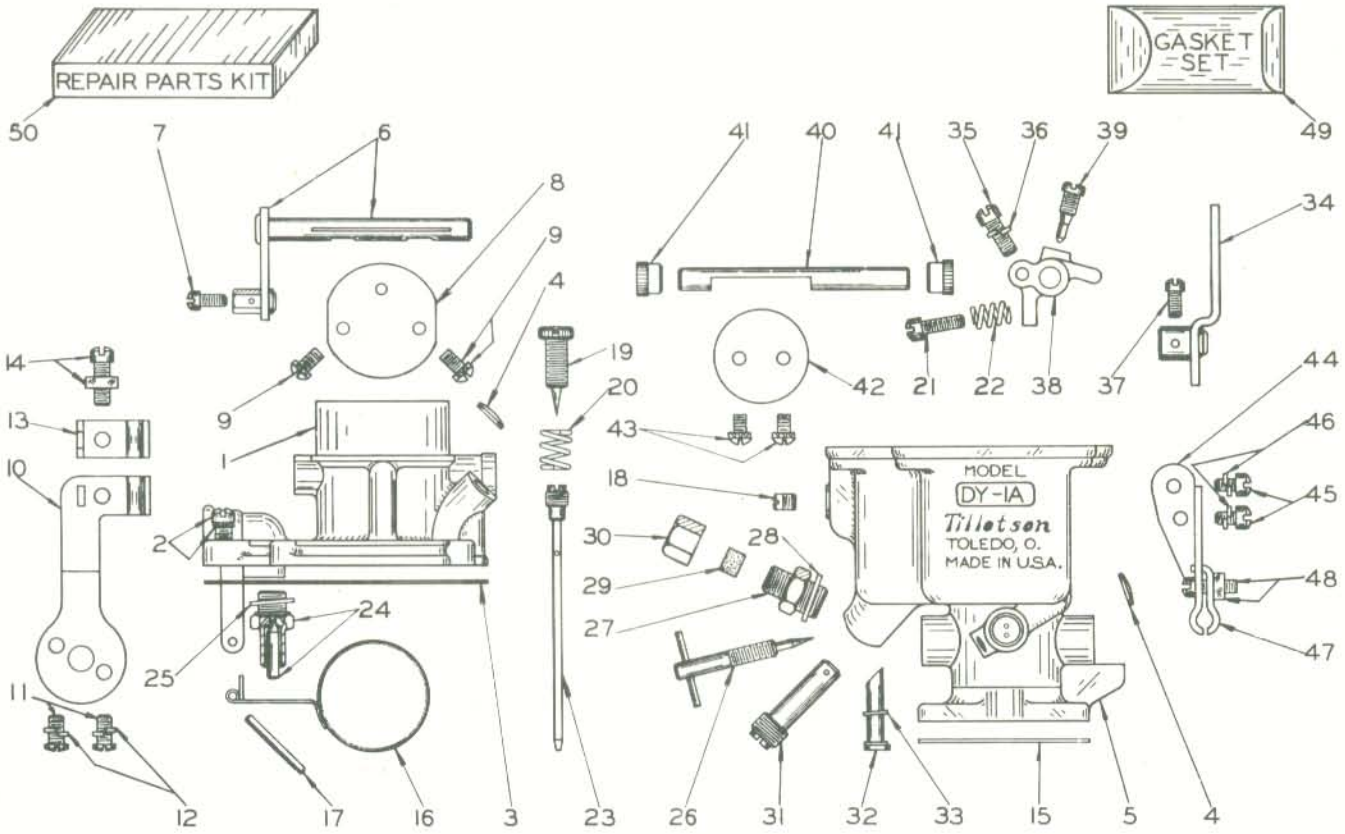
FUEL STRAINERS **Tillotson** CARBURETORS

YEAR BUILT: 1939-48

CARBURETOR MODEL: DY-1A



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

Ref. No.	No. Req.	DY-1A Part No.	Part Name
1	1	06420	Air Horn
2	6	08420	Air Horn Retaining Screw & Lockwasher
3	1	06409	Air Horn Gasket
4	2	*02531	Air Horn & Body Channel Welch Plug
5	1	06422	Body
6	1	06450	Choke Shaft & Lever
7	1	* 058	Choke Wire Retaining Screw
8	1	06261	Choke Shutter
9	2	08317	Choke Shutter Screw & Lockwasher
10	1	06411	Choke Wire Bracket
11	2	01974	Choke Wire Bracket Retaining Screw
12	2	0992	Choke Wire Bracket Ret. Screw Lockwasher
13	1	03028	Choke Wire Clamp
14	1	0799	Choke Wire Clamp Bolt & Nut
15	1	0278	Flange Gasket
16	1	06436	Float
17	1	*06233	Float Lever Pin
18	1	*03311	Float Bowl Inspection Screw
19	1	*06336	Idle Adjustment Screw
20	1	* 0737	Idle Adjustment Screw Spring

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

Ref. No.	No. Req.	DY-1A Part No.	Part Name
21	1	*05095	Idle Speed Regulating Screw
22	1	* 0788	Idle Speed Regulating Screw Spring
23	1	*07009	Idle Tube
24	1	*06287	Inlet Needle, Seat & Gasket
25	1	0676	Inlet Seat Gasket
26	1	*03076	Main Adjustment Screw
27	1	02656	Main Adjustment Screw Gland
28	1	0225	Main Adjustment Screw Gland Gasket
29	1	0705	Main Adjustment Screw Packing
30	1	0703	Main Adjustment Screw Packing Nut
31	1	*06413	Main Nozzle
32	1	06406	Main Nozzle Outlet Tube
33	1	06407	Main Nozzle Outlet Tube Gasket
34	1	06451	Throttle Lever (Inc. Wire Connection)
35	1	0240	Throttle Lever Retaining Screw
36	1	0992	Throttle Lever Retaining Screw Lockwasher
37	1	058	Throttle Wire Retaining Screw
38	1	06355	Throttle Stop Lever
39	1	* 051	Throttle Stop Lever Retaining Screw
40	1	*06363	Throttle Shaft
41	2	02661	Throttle Shaft Bushing
42	1	06232	Throttle Shutter
43	2	*08317	Throttle Shutter Screw & Lockwasher
44	1	06446	Throttle Wire Bracket
45	2	056	Throttle Wire Bracket Retaining Screw
46	2	0992	Throttle Wire Bracket Retaining Screw Lockwasher
47	1	03028	Throttle Wire Clamp
48	1	0799	Throttle Wire Clamp Bolt & Nut
49		*07144	GASKET & PACKING SET
50		07443	REPAIR PARTS KIT

(*) Indicates contents of designated REPAIR PARTS KIT.

FLOAT LEVEL: To set correctly, remove Upper Body Assembly containing complete float mechanism. Turn upside down and with float lever resting on the Inlet Needle, carefully bend EACH lever arm, if necessary, to give a distance of one and twenty-seven sixty-fourths (1-27/64) inches from face of body gasket to the then top of raised seam encircling each float. This measurement must be maintained with both floats to obtain proper performance. As a guide, the fuel level will be found after carburetor assembly, just below lowest portion of Float Bowl Inspection Hole. When inspection indicates level continues to rise beyond setting point, remove Inlet Needle and Seat, clean their seating surfaces with a soft clean cloth. Place Inlet Needle in its Seat and tap very lightly, turning Inlet Needle with the thumb and forefinger several times to reseat. Reinstall and if proper level is not maintained, install a new Inlet Needle and Seat Assembly. DO NOT CHANGE GASOLINE LEVEL FROM MANUFACTURERS SPECIFICATIONS.

ADJUSTMENT INSTRUCTIONS

Separate manual carburetor adjustments are provided. Main Adjustment Screw (26) controlling power range mixture and Idle Adjustment Screw (19) governing idle mixture at closed throttle and Idle Speed Regulating Screw (21) controlling required idling speed.

INITIAL ADJUSTMENT: Completely close Idle Adjustment Screw (19) by turning in (clockwise) until seated (without forcing) then turn back in opposite direction one and one-quarter turn. Proceed in like manner with Main Adjustment Screw (26) except open two full turns after first being closed. 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-half (1/2) open throttle position, slowly turn Main Adjustment Screw (26) inward (clockwise) until motor begins to lose speed, then slowly turn back in opposite direction (at 1/8th turn steps) until maximum speed and power is obtained. Final setting should be approximately one and three quarter (1-3/4) turns open.

IDLE MIXTURE ADJUSTMENT: This adjustment should only be made AFTER the above mentioned power range adjustment has been completed. Close throttle and allow engine to idle at slightly faster than normal idling speed requirements by turning Idle Speed Regulating Screw (21), located on throttle stop lever, inward. Next, slowly turn Idle Adjustment Screw (19) 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. Now slowly back out Idle Speed Regulating Screw (21) until desired idling speed is obtained. Final Idle Adjustment Screw (19) setting should be approximately one full turn open.

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. Regardless of altitude or climatic conditions a proper carburetor adjustment can be made by following the above rules - which eliminates jet changes.

Revised 6/16/53

PRINTED IN U. S. A.

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