

## MODELS V, VB, VE, VH

V-10-722 - ESSEX SUPER SIX MODEL (1929)  
 V-3-10-778 - ESSEX SUPER SIX MODEL (1930)  
 VE-3-10-917 - ESSEX SUPER SIX MODEL (1931)  
     10-995 - ESSEX SUPER SIX MODEL (1932) - FIRST CARS  
     10-1505 - ESSEX SUPER SIX MODEL (1932) - LATER CARS

VB-10-724 - HUDSON SUPER SIX MODEL (1929)  
 VH-4-10-776 - HUDSON EIGHT MODEL (1930)  
     10-949 - HUDSON EIGHT MODEL (1931)  
     10-989 - HUDSON GREATER EIGHT MODEL (1932)  
     10-1533 - HUDSON SUPER SIX MODEL (1933)  
     10-1536 - HUDSON GREATER EIGHT MODEL (1933)

**TYPE:** - Automatic air valve updraft type with throttle operated economizer (all models), accelerating pump (V, V-3, VE-3, only), and Marvel Heat Control. Heat control on Hudson 1929 Model VB carburetor is throttle operated, dash regulated (manipulation of dash heat regulator lever is an operating adjustment). Heat control on Essex 1929-30-31 Models V, V-3, VE-3 carburetors and Hudson 1930-31 Model VH4 carburetor, carburetors is throttle operated with a seasonal control on the engine manifold. Heat control on 1932-33 Essex and 1932-33 Hudson models is automatic thermostatic control type (see description of all heat controls below).

**NOTE:** - Intermediate high speed jets are not used on the Essex Models 722 and 778 carburetors. This will not affect adjustment instructions given below. See Specification Table for complete jet assemblies.

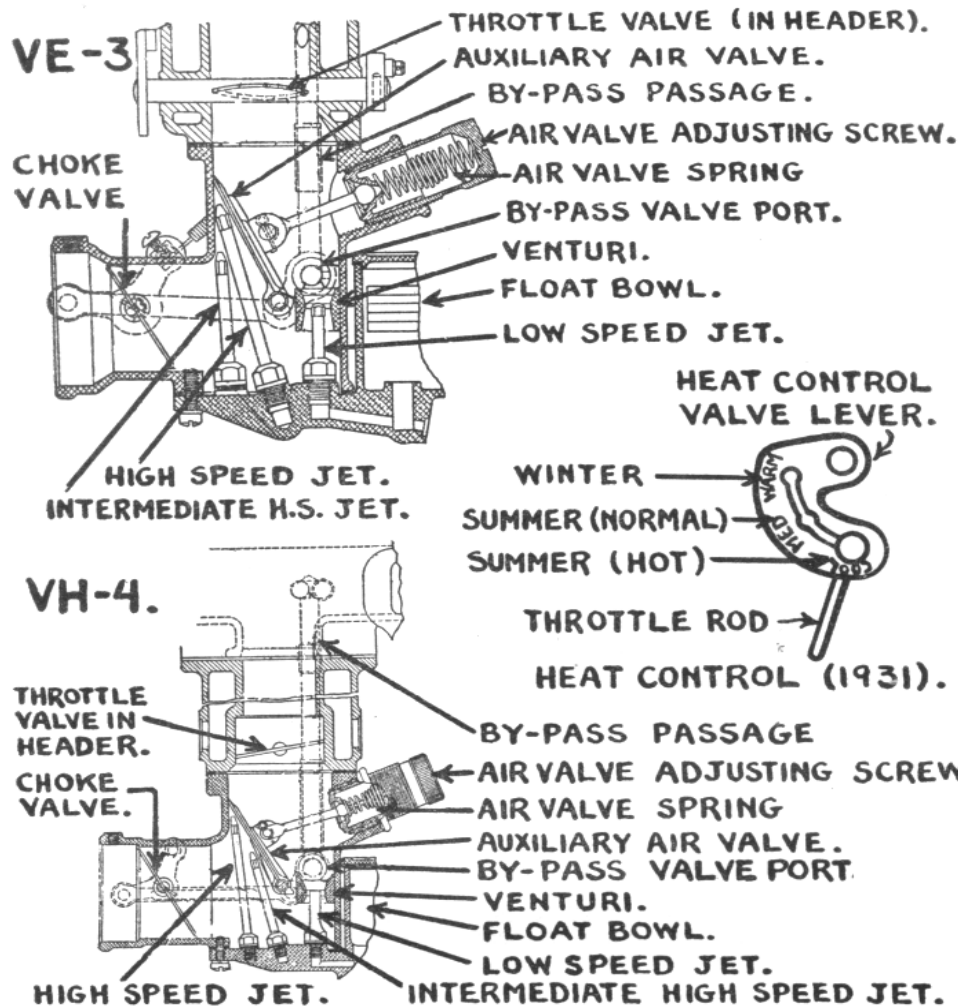
**ADJUSTMENT:** - On Hudson 1929 models place dash heat regulator lever in "Hot" position and leave lever in this position while adjusting carburetor. On 1929-30-31 Essex models, 1930-31 Hudson models, see that throttle connection on heat control valve lever is in "Warm" position (see illustration) while carburetor is being adjusted. This is important. Make a preliminary adjustment of the air valve screw by turning screw in or out until end of screw is flush with end of ratchet spring. Warm up engine thoroughly. With engine warm and running, close throttle and allow engine to idle. Turn air valve screw In or clockwise until engine begins to roll (mixture too rich), turn screw out until engine begins to hesitate or miss (mixture too lean), then turn screw slowly in until engine fires smoothly. Adjust throttle lever stop screw for correct idling speed (7 MPH on Hudson-Essex models).

**PERFORMANCE AND SPECIFICATIONS:** - Performance should be satisfactory throughout entire driving range if air valve adjustment has been made correctly. Air valve spring length should not be changed and spring should be replaced if it has been tampered with. Jets should be changed only for permanent operation at elevations greater than 4000 feet. Standard and float high altitude jet calibrations are shown in Marvel Jet Specification table. Jet heights and clearances are shown in table below:

Carburetor	Jet Heights			Jet Clearance
	H.S. Jet	Inter. H.S. Jet	L.S. Nozzle	H.S Jet from Wall
10-722	2.666-2.699"		1 1/4"	.010"
10-724	2.964-2.997"	2.268-2.302"	1.271-1.291"	.016"
10-738	2.505-2.539"	-----	1 1/4"	.052"
10-749	2.802-2.836"	1.889-1.923"	1.211-1.274"	-----
10-776	2.964-2.997"	2.233-2.267"	1.271-1.281"	-----
10-778	2.776-2.810"	-----	1 1/4"	.029"
10-947	2.746-2.776"	1.883-1.923"	1 1/4"	.030"
10-949	2.964-2.997"	2.233-2.267"	1.271-1.281"	.016"
10-989	2.964-2.997"	2.485-2.515"	1 9/32"	.018"
10-995	2.746-2.776"	1.883-1.923"	1 1/4"	.030"
10-1505	2.746-2.776"	1.883-1.923"	1 1/4"	.030"
10-1533	2.746-2.776"	1.883-1.923"	1 1/4"	.030"
10-1536	2.964-2.997"	2.485-2.515"	1 9/32"	.018"

**ECONOMIZER:** - Economizer consists of metering jet and metering pin connected to throttle lever (metering pin is part of accelerating pump plunger assembly on VE-3). Fuel supply for high speed jets is controlled by economizer at all partial throttle positions to assure maximum economy. At high speeds (60 MPH on VE-3 or 65-70 MPH on VH-4) or with wide open throttle, economizer permits greater fuel flow for maximum power. Economizer is not adjustable and does not require attention.

**ACCELERATING PUMP:** - V, V-3, VE-3, Models only. Accelerating pump is operated by throttle lever and discharges fuel to high speed jets when throttle is opened for acceleration. A check valve in the pump intake channel prevents fuel discharged by the pump flowing back into the float bowl. Accelerating pump used on Model VE3 carburetors is not adjustable and should not require attention.



pump discharge to be by-passed back to the float bowl.

**FLOAT LEVEL:** - To check float level on all models, take off float bowl cover, remove gasket, measure distance from top edge of bowl to top of float with needle valve held closed. Correct float heights are given in the table below.

Do not attempt to change float level by bending float lever.

Car	Carburetor Model	Float Level
Essex 1929, 30	10-722, 778	5/16"
Essex 1931, 32, 33	10-947, 995, 1505, 1533	11/32"
Hudson 1929 to 1933	All Models	19/64"

**HEAT CONTROL:** - Carburetor header on all models is jacketed for exhaust gas heating. The exhaust gas flow through the jacket is controlled by a throttle operated rod so that the amount of heat applied is progressively decreased as the throttle is opened. In addition to the throttle control an operating adjustment (dash control) or seasonal adjustment (at the manifold) is provided as follows:

**1929 Hudson:** - On these models a dash regulator lever is located under the instrument panel. This adjustment should be manipulated by the car operator and does not require attention except that lever must be placed in "hot" position while the carburetor is being adjusted.

**1929-31 Essex, 1930-31 Hudson:** - On these models the throttle rod connection to the damper valve on the exhaust manifold is adjustable for three positions: "Warm" or "Hot" should be used for very cold temperatures or winter driving and when carburetor is being adjusted, "Med" should be used for ordinary temperature ranges, "Cool" should only be used for extremely hot temperatures (in excess of 100° F) or with high test gasoline. See illustration showing heat control valve or damper valve lever connections. Throttle rod must be placed in "Hot" position while carburetor is being adjusted.

**1932-33 Essex, 1932-33 Hudson:** - On these models damper valve controlling exhaust gas flow through jacket is controlled by an automatic thermostat, This type requires no attention.

**Adjustment:** - V, V-3, Models. Accelerating pump control rod pointer or handle is located on the float bowl cover. Pointer should be turned to position opposite "Winter" mark providing maximum pump discharge for cold weather or winter operation (heat control must be in "Warm" position). For warm weather operation change heat control to "Med." position and If car performance is still sluggish change accelerating pump control pointer to "Summer" position. In this position the control rod prevents the check valve closing and allows some of the

**CHOKE:** - Choke valve is held in position on choke valve shaft by a spring which allows choke to open against spring tension when engine begins to fire, preventing over-choking and assisting in warming up. Choke valve shaft also operates by-pass idling valve through a connecting lever. Adjust choke linkage so that choke valve is fully closed when choke control button on instrument panel is pulled all the way out and wide open with button pushed in.