

CARTER
CARBURETOR BULLETINS

Hudson

1948-1954

CAR AND MOTOR NUMBERS

"481"—481101 and up
 "482"—482101 and up
 "483"—483101 and up
 "484"—484101 and up
 "491"—491101 and up
 "492"—492101 and up
 "493"—493101 and up
 "494"—494101 and up



Casting No. 542 on face of flange.

HUDSON

"481"- "482" SIXES
 "483"- "484" EIGHTS
 "491"- "492" SIXES
 "493"- "494" EIGHTS
 1948-1949

(647S Superseded by 647SA)

WDO Dual Down-Draft Climatic Cont. Carbs. Nos. 647S-647SA (6), 648S (8)—List Price \$26.00

A \$6.00 exchange allowance is deducted from the list price if buyer turns in the old carburetor.

CARBURETOR SPECIFICATIONS

For Hudson 647S-647SA Six Cyl. Engine 3-9/16" Bore, 4 1/2" Stroke. For Hudson 648S Eight Cyl. Engine 3" Bore, 4 1/2" Stroke.

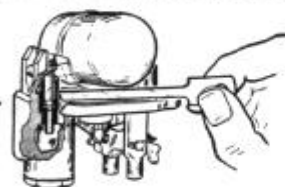
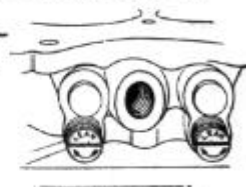
Dimensions: 1 1/4 inch dual, 4 bolt flange.
 Primary venturi, 1 1/32 inch I. D.
 Secondary venturi, 19/32 inch I. D.
 Main venturi, 1-3/16 inch I. D.

Float Level: Distance from float to bowl cover, when needle is seated, to be 3/16 inch (647S-647SA), 13/64 inch (648S).
 Vents: Outside, No. 10 drill size—four holes. Inside, none.
 Gasoline Intake: Square vertical needle. Size No. 38 drill hole in needle seat.
 Gas Line Connection: 5/16 inch Weatherhead nipple.
 Low Speed Jet Tube: (647S-647SA). Jet size, No. 67 drill.
 (648S) Jet size, No. 68 drill.
 (647S) By-pass (plug, 11B-167), size No. 51 drill.
 (647SA) By-pass (plug, 11B-159), size No. 52 drill.
 (648S) By-pass (plug), size No. 54 drill.
 Economizer in body, size No. 56 drill.
 Idle bleed, size No. 54 drill (early production); No. 56 drill (late production).
 Idle Ports: Length, .200 inch; width, .030 inch.
 Idle Port Opening: .157 to .163 inch above upper edge of valve with valve closed tight.
 Lower Port (For Idle Adjustment Screw): Size, .0615 to .0655 inch diameter.
 Set Idle Adjustment Screw (647S-647SA) 1 1/4 to 1 1/2, (648S) 1 to 1 1/2 turns open. For richer mixture, turn screw out. Do not attempt to idle engine below 550 r.p.m. or 8 m.p.h.
 Main Nozzle: (647S-647SA). In primary venturi, angle 45°. Closed tip. Inside diameter No. 30 drill.
 Upper hole: .028 inch dia. drill on 45° angle.

Lower hole: .0625 inch dia. drill on 60° angle.
 (648S) Flush type (angle tip) seats in primary venturi. Discharge, size .0635 inch diameter (early production), size .061 inch (later production).
 Metering Rod (Vacuum Type): (647S-647SA). Economy step, .061 inch diameter; middle step tapers to .0565 inch diameter; power step, .048 inch diameter. Length 2-59/64 inches.
 (648S) Economy step, .068 inch diameter; middle step tapers to .063 inch diameter; power step, .055 inch diameter. Length 2-59/64 inches.
 Metering Rod Jet: .086 inch diameter.
 Metering Rod Setting: Use gauge, part No. T109-113 (2.280 inches).
 Accelerating Pump: High pressure type (spring operated lever), with adjustable pump stroke.
 Discharge jets (twin) size, No. 74 drill.
 Intake ball check, size No. 40 drill.
 Discharge (needle seat), size No. 50 drill.
 Relief passage (to outside), thru slots in air horn.
 Pump Adjustment: (647S-647SA) 18/64" (648S) 14/64" plunger travel (full throttle position) long stroke. Use gauge No. T109-117S.
 Choke: Carter Climatic Control, (647S-647SA) set 1 point lean, (648S) set on index. Butterfly type, offset valve.
 Choke heat suction hole (in body), size No. 34 (.111 inch) drill.
 Vacuum Spark Port: .039 to .041 inch diameter. Top of port .012 to .022 inch above valve.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.

Spark Plug
Gap
.032"Breaker Point
Setting
6 Cyl.—.020"
8 Cyl.—.017"Ignition Timing
Breaker Points to Open
T. D. C.Valve Setting
Int.—.008"
Exh.—.010"
6 Cyl.
Int.—.006"
Exh.—.008"
8 Cyl.Float Setting
3/16 inch (647S-647SA)
13/64 inch (648S)Idle Adjustment
Screw Setting
(647S-647SA)
1/4 to 1 1/4
(648S) 1 to 1 1/2
Turns Open

CARBURETOR ADJUSTMENTS

PUMP ADJUSTMENT: With pump connector link in long stroke (outer hole in pump arm), and throttle adjusting screw backed out, pump plunger should travel 18/64" (647S-647SA), 14/64" (648S) from closed to wide open throttle positions. Pump travel should be measured by placing gauge T109-117S on raised portion of bowl cover around the plunger shaft. Projecting portion of indicator should be placed on top surface of connector link where it extends through the plunger shaft. The difference between reading at wide open and closed throttle positions should be "18" (647S-647SA), "14" (648S). Adjust by bending throttle connector rod at lower angle.

METERING ROD ADJUSTMENT: Must be made when re-assembling carburetor or when leaner than standard metering rods are installed. Do not disturb pump adjustment. Procedure is as follows:

- Back out throttle lever adjustment screw until throttle valves seat. Insert one metering rod gauge T109-113 in place of metering rod. Be sure gauge seats in metering rod jet.
- Install metering rod pin and pin spring in vacuum piston link assembly.

- Press lightly on top of vacuum piston link until lip contacts tongue on anti-percolator arm. There now should be less than .005" clearance between metering rod pin and shoulder in notch of gauge with throttle valve seated.

Adjust by bending tongue on pump arm (Use Tool T109-105). Remove gauge and metering rod pin and install metering rods, discs, spring, pin and pin spring, and hook spring to metering rod. Vacuum piston and link must not bind and drag in any position.

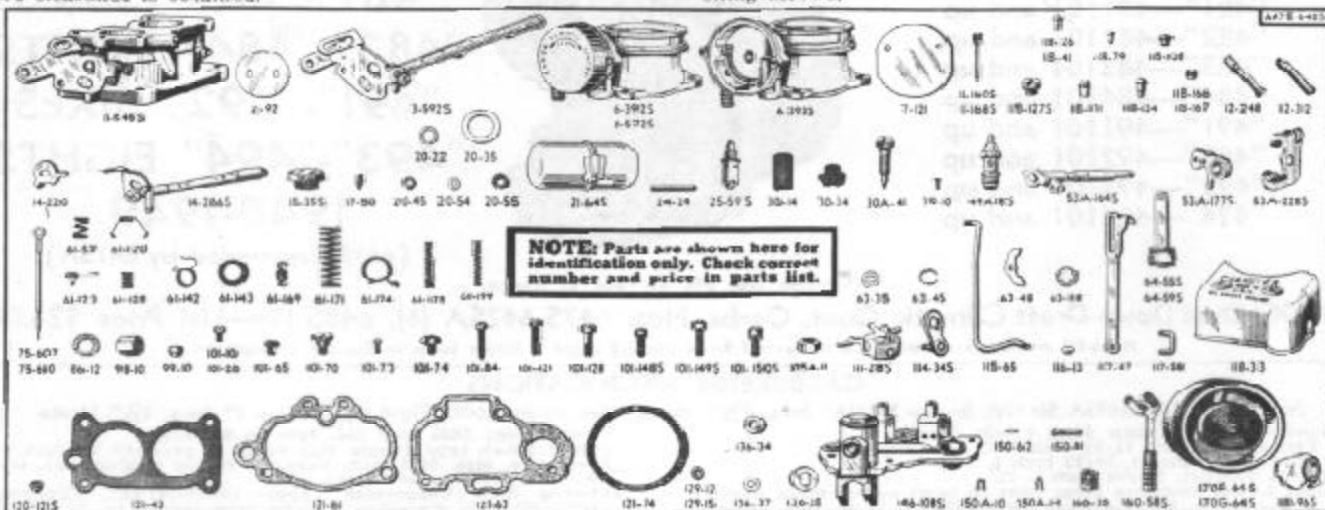
ANTI-PERCOLATOR ADJUSTMENT: After adjusting pump stroke and metering rods, bend lips on anti-percolator arm so that center of indicator line on anti-percolator valves is flushed with top of anti-percolator plugs. Since there are two anti-percolators on this carburetor, care must be taken so that there is an even adjustment on both anti-percolator valves. Be sure throttle valves are seated when making this adjustment.

UNLOADER ADJUSTMENT: With throttle valves wide open, distance between upper edge of choke valve and inner wall of air horn should be 1/4" (Gauge T109-31). Adjust by bending lip on fast idle connector link. When unloader is

adjusted properly, with throttle valve wide open, move choke valve to wide open position and choke valve will lock in open position.

FAST IDLE ADJUSTMENT: With choke valve tightly closed and fast idle screw on high step of fast idle cam, there should be .054" clearance between throttle valves and bore of carburetor (side opposite idle port). Adjust by turning fast idle adjusting screw (on high step of cam) until specified clearance is obtained.

FLANGE ASSEMBLY: Assemble in the following manner in order to center throttle valves properly and eliminate excessive endplay in the throttle shaft. Install throttle shaft and lever assembly and place throttle shaft retaining ring firmly on stub of shaft with prongs extended outward. Take out all endplay by pressing retaining ring on shaft as far as possible. Then install throttle valves with "o" in circle toward the idle port when viewed from the manifold side. To center valves tap lightly holding in place with fingers while tightening screws.



NOTE: Parts are shown here for identification only. Check correct number and price in parts list.

Hudson—1948-1949—Nos. 647S-647SA-648S—List Price \$26.00

WHEN SERVICING, USE GASKET ASST. No. 149, PRICE \$0.35; REPAIR PACKAGE No. 1381A, PRICE \$4.65
FOR 647S-647SA; No. 1382, PRICE \$4.65 FOR 648S

PART NAMES IN BOLD TYPE, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	List Price	Part No.	PART NAME	List Price
1-545S	Body flange assembly.....	\$4.50	75-624	Metering rod—2 sizes lean .065\"	.30
3-92	Throttle valve.....	(2) 1.00	75-625	Metering rod—3 sizes lean .065\"	.30
3-592S	Throttle shaft and lever assembly.....	6.00	75-626U	Unitized package (Consists of 75-624 and 75-625) (647S-647SA).....	1.20
6-392S	Air horn assembly (647S-647SA).....	2.25	75-627	Metering rod—1 size lean .069\"	.30
6-393S	Air horn and pump jet assembly.....	6.00	75-628	Metering rod—2 sizes lean .0705\"	.30
6-572S	Air horn assembly (648S).....	.20	75-629	Metering rod—3 sizes lean .0705\"	.30
7-121	Choke valve.....	.30	75-630U	Unitized package (Consists of 75-628 and 75-629) (648S).....	1.20
11-160S	Low speed jet assembly (648S).....	.30	75-636	Metering rod—Standard .061\"	.30
11-168S	Low speed jet assembly (647S-647SA).....	.02	75-700U	Unitized package (Consists of 2—75-636, 2—11B-159 and 1—107-30).....	1.05
11B-26	Rivet plug.....	.02	86-12	Flange stud lock washer.....	.15
11B-41	Rivet plug.....	.02	98-10	Compression coupling nut.....	.10
11B-79	Rivet plug.....	.02	101-10	Compression coupling cone.....	.05
11B-108	Idle port rivet plug.....	.02	101-26	Metering rod arm clamp screw.....	.05
11B-127S	Nozzle passage plug and gasket assembly.....	.10	101-45	Coil housing attaching screw.....	.05
11B-130	Nozzle retainer plug.....	.10	101-70	Choke shaft attaching screw.....	.10
11B-131	Nozzle retainer plug (Sup. by 11B-130).....	.02	101-74	Fast idle arm attaching screw.....	.05
11B-134	Rivet plug.....	.02	101-84	Throttle valve attaching screw.....	.05
11B-159	By-pass bleeder screw plug (647S-647SA).....	.20	101-121	Throttle shaft arm attaching screw.....	.05
11B-166	By-pass bleeder screw plug (648S).....	.20	101-122	Fast idle adjustment screw.....	.05
11B-167	By-pass bleeder screw plug (Sup. by 11B-159).....	.30	101-128	Throttle lever adjustment screw.....	.15
12-24S	Nozzle (647S-647SA).....	.30	101-148S	Air horn attaching screw (Special).....	.05
12-312	Nozzle (648S).....	.30	101-149S	Bowl cover attaching screw and washer assy.....	.05
14-220	Choke trip lever.....	.40	101-150S	Body flange attaching screw and washer assy.....	.05
14-266S	Choke piston lever, link and shaft assembly.....	.30	105A-11	Flange stud nut.....	.20
15-35S	Strainer nut and gasket assembly.....	.15	111-28S	Anti-percolator arm and screw assembly.....	.10
17-50	Pump check needle.....	.05	114-34S	Throttle shaft arm and pin assembly.....	.10
20-22	* Needle seat and nozzle plug gasket.....	.05	115-65	Throttle connector rod (Sup. by 11B-135).....	.25
20-35	* Bowl strainer gasket.....	.05	116-11	Throttle connector rod.....	.02
20-45	* Nozzle gasket.....	.05	117-47	Pump discharge check ball.....	.10
20-54	* Metering rod jet gasket.....	.05	117-58	Fast idle connector link.....	.05
20-55	* Idle passage gasket.....	.05	118-33	Pump arm connector link.....	.50
21-64S	Float and lever assembly.....	.05	120-121S	Dust cover.....	.30
24-24	Float lever pin.....	.80	121-43	Metering rod jet and gasket assembly.....	.25
25-59S	Needle and seat assembly.....	.10	121-61	Body flange gasket.....	.10
30-14	Bowl cover strainer gauze.....	.10	121-63	Air horn gasket.....	.10
30-34	Pump strainer.....	.10	121-74	Bowl cover gasket.....	.05
30A-41	Idle adjustment screw.....	.05	129-12	Coil housing gasket.....	.05
39-10	Choke valve attaching screw.....	.05	129-15	Metering rod disk (647S-647SA) (Sup. by 129-18).....	.02
49A-18S	Anti-percolator valve assembly.....	.50	129-18	Metering rod disk (648S).....	.02
53A-164S	Pump operating lever and countershaft assembly.....	.25	136-34	Metering rod disk (647S-647SA).....	.02
53A-177S	Pump arm and collar assembly.....	.30	136-37	Choke shaft washer.....	.02
53A-228S	Fast idle arm, pin and screw assembly.....	.05	146-10RS	Connector rod washer.....	.02
61-57	Adjustment screw lock spring.....	.10	150-62	Throttle shaft washer.....	.02
61-120	Metering rod spring.....	.10	150-81	Bowl cover assembly.....	1.30
61-123	Connector link spring.....	.10	150A-10	Piston pin.....	.02
61-128	Connector rod spring (Use with 11B-60).....	.05	150A-14	Metering rod pin.....	.05
61-142	Fast idle arm spring.....	.10	160-35	Pin spring.....	.01
61-143	Plunger spring.....	.10	160-58S	Countershaft pin spring.....	.01
61-169	Pump arm spring.....	.10	170F-64S	Choke piston.....	.20
61-171	Pump spring.....	.10	170F-64SU	Vacuum piston and link assembly.....	.30
61-174	Fast idle cam spring.....	.10	170F-64SU	Thermostatic coil and housing assembly (648S).....	2.00
61-178	Vacuum piston spring (648S).....	.05	170G-64S	Unitized package (Consists of 1—170F-64S, 2—63-45, 2—101-26, 1—121-74) (648S).....	2.27
61-199	Vacuum piston spring (647S-647SA).....	.05	170G-64SU	Thermostatic coil and housing assembly (647S-647SA).....	2.00
63-35	Spring retainer (Use with 11B-65).....	.05	172-24	Unitized package (Consists of 1—170G-64S, 2—63-45, 2—101-26, 1—121-74) (647S-647SA).....	2.27
63-45	Ball retainer ring.....	.05	181-96S	Throttle connector rod retainer (Use with 11B-135).....	.05
63-48	Housing retainer.....	.05		Fast idle cam assembly.....	.30
63-118	Throttle shaft retaining ring.....	.05			
64-55S	Plunger and rod assembly (Identify by shaft No. 49-113) (647S-647SA).....	.70			
64-59S	Plunger and rod assembly (Identify by shaft No. 49-119) (648S).....	.70			
75-607	Metering rod—Standard .062\"	.30			
75-610	Metering rod—Standard .062\"	.30			
75-623	Metering rod—1 size lean .0645\"	.30			

*Parts so marked are new and listed for first time.

*Gaskets so marked must be soaked in 90 proof denatured alcohol for 15 minutes, installed on part, and let dry before using.
NOTE: Small figures in parentheses preceding list price indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

EFFECTIVE JANUARY 1, 1948, ADD 30% TO LIST PRICE OF CARBURETORS AND EFFECTIVE OCTOBER 1, 1948, AND 20% TO ALL OTHER PRICES SHOWN WITH FRACTIONAL ADJUSTMENT TO NEAREST EVEN CENT.

CAR AND MOTOR NUMBERS

500101 and higher



Casting No. 682 on face of flange

HUDSON

MODEL "500"

1950

WAI Down-Draft Climatic Control Carburetor—Model 749S—List Price \$19.00

A \$5.00 exchange allowance is deducted from the list price if buyer turns in old carburetor.

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3-9/16 Inch Bore, 3 7/8 Inch Stroke

Dimensions: Flange size, 1 1/2 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

Main venturi, 1 3/8 inch I. D.

Float Level: Distance from seam of float (at free end) to tip on lower edge of float chamber cover, when needle is seated to be 1/2 inch.

Vents: Outside, No. 10 drill. Inside, none.

Gasoline Intake: Square vertical needle. Size No. 46 (.081") drill hole in needle seat.

Gas Line Connection: 5/16 inch Weatherhead nipple.

Low Speed Jet Tube: Jet size, No. 65 drill. By-pass, size 1.6 mm drill. Economizer, in body, .0545-.0555 inch diameter. Idle bleed, size No. 52 drill.

Idle Port: Length .190 inch; width .040 inch.

Idle Port Opening: .136 to .140 inch above valve with valve closed tight.

Idle Screw Seat: No. 46 drill.

Set Idle Adjustment Screw: 1/2 to 1 1/2 turns open. For richer mixture, turn screw out. Do not attempt to idle engine below a speed equivalent to 7 1/2 to 8 m.p.h. on level road.

Main Nozzle: (Assembly) Slip nozzle, flush type, (angle tip) seats in primary venturi, at 45° angle. Discharge jet size, .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120") drill.

Metering Rod (Vacumeter Type): Economy step, .0745 inch diameter; middle step tapers to .066 inch; power step, .040 inch diameter. Length, 3-9/64 inches.

Metering Rod Jet: .1015 inch diameter.

Metering Rod Setting: Use gauge, part No. T109-102 (2.468 inches).

Accelerating Pump: Pressure type with adjustable stroke. Discharge jet, size No. 72 drill. Intake ball check, size No. 60 drill. Discharge ball check, size No. 32 drill. Relief passage (to outside), size No. 42 drill.

Pump Adjustment: 16/64 inch plunger travel (full throttle position) short stroke. Use gauge No. T109-117S.

Choke: Carter Climatic Control, set at index. Butterfly type, offset valve. Choke Heat Suction Hole, in body, size No. 30 drill.

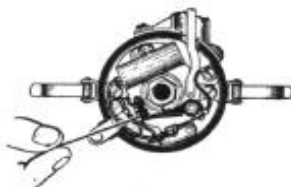
Vacuum Spark Port: .054-.057 inch diameter. Bottom of port .020 inch above valve.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



Spark Plug
Gap
.032"



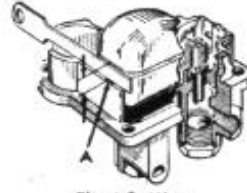
Breaker Point
Setting
.020"



Ignition Timing
Breaker Points to Open:
T. D. C.



Valve Setting
(Hot)
Intake .008"
Exhaust .010"



Float Setting
(Measure from point "A"
to top of float seam)
1/2 Inch



Idle Adjustment
Screw Setting
1/2 to 1 1/2
Turns Open

CARBURETOR ADJUSTMENTS

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (short stroke), pump plunger should travel 16/64" from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge

vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64").

Adjust by bending throttle connector rod at lower angle.

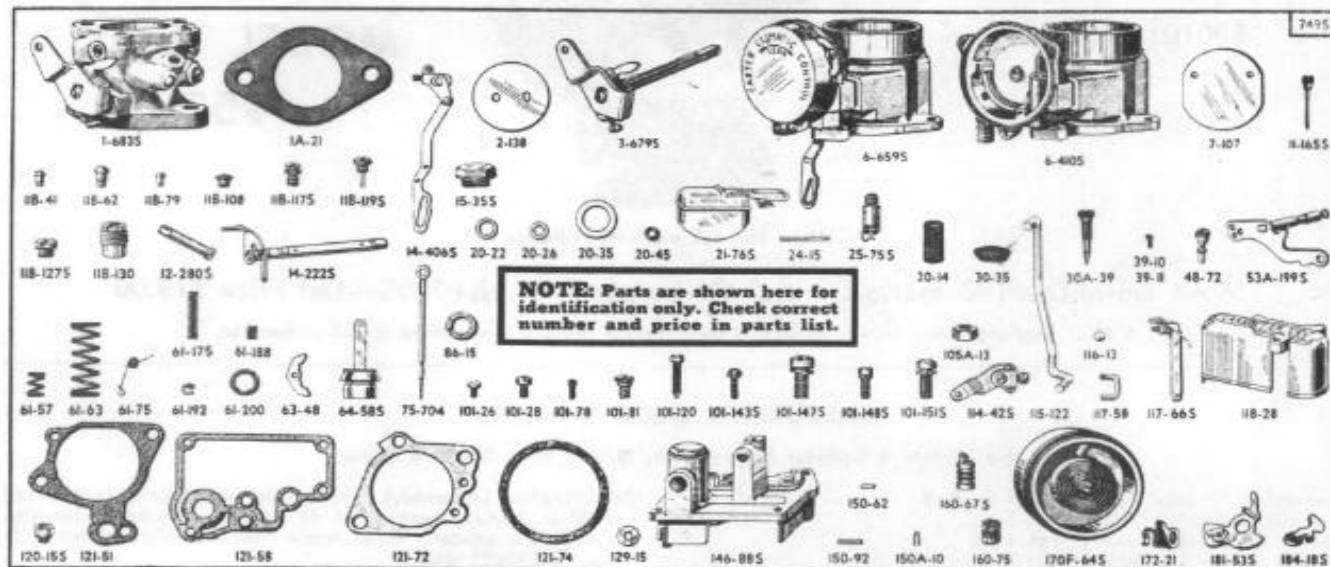
METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed.

Insert gauge (tool No. T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link, directly over piston until it contacts the pump arm. There should now be less than .005" clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin.
Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.
ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .020" by placing gauge T109-29 between throttle valve and bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .005" to .015" between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw.

There should now be 5/8" clearance between inside wall of air horn and lower edge of choke valve. (Use tool T109-85.) Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be 7/16" clearance between lower edge of choke valve and inner wall of air horn (T109-80). Adjust by bending cam on throttle lever (T109-41).



Hudson 6-1950—No. 749S—List Price \$19.00

Part No.	PART NAME	List Price	Part No.	PART NAME	List Price
1-683S	—Body flange assembly.....	\$3.75	63-48	Housing retainer.....	(3) .05
1A-21	Flange gasket.....	.05	64-58S	Plunger and rod assembly (Identify by shaft No. 149-108).....	.70
2-138	Throttle valve.....	.10	75-704	—Metering rod—standard—.0745"—.0745" to .006"—.040".....	.30
3-679S	Throttle shaft and lever assembly.....	.75	86-15	Flange stud lock washer.....	(2) .01
6-410S	Air horn and piston housing assembly.....	2.00	101-26	Coil housing attaching screw.....	(3) 2 for .05
6-659S	Air horn assembly.....	5.50	101-28	Throttle shaft arm clamp screw.....	.05
7-107	Choke valve.....	.20	101-78	Choke lever clamp screw.....	.05
11-165S	Low speed jet assembly.....	.30	101-81	Fast idle cam screw.....	.10
11B-41	Rivet plug.....	.02	101-120	Throttle lever adjusting screw.....	.05
11B-62	Body flange rivet plug.....	.02	101-143S	Piston housing attaching screw and washer assembly.....	.05
11B-79	Rivet plug.....	(5) .02	101-147S	Body flange attaching screw and washer assembly.....	(2) .05
11B-108	Idle port rivet plug.....	.02	101-148S	Bowl cover attaching screw and washer assembly.....	(5) .05
11B-117S	Idle passage plug and gasket assembly.....	.10	101-151S	Air horn attaching screw and washer assembly.....	(2) .05
11B-119S	Ball retainer screw plug and gasket assembly.....	.10	105A-13	Flange nut.....	(2) .05
11B-127S	Passage plug and gasket assembly.....	(2) .10	114-42S	Throttle shaft arm and screw assembly.....	.20
11B-130	Nozzle retainer plug.....	.10	115-122	Throttle connector rod.....	.25
12-280S	Nozzle assembly.....	.45	116-13	Pump intake and discharge check ball.....	(2) .02
14-222S	Choke piston lever, link and shaft assembly.....	.60	117-58	Pump connector link.....	.05
14-406S	Choke lever, screw and link assembly.....	.30	117-66S	Piston link and spring assembly.....	.25
15-35S	Strainer nut and gasket assembly.....	.30	118-28	Dust cover.....	.50
20-22	*Gasket.....	(3) .05	120-15S	Metering rod jet and gasket assembly.....	.30
20-26	*Gasket.....	(3) .05	121-51	Air horn gasket.....	.05
20-35	*Bowl strainer gasket.....	.05	121-58	Bowl gasket.....	.10
20-45	Nozzle gasket.....	.05	121-72	Body flange gasket.....	.10
21-76S	Float and lever assembly.....	.80	121-74	Coil housing gasket.....	.05
24-15	Float lever pin.....	.05	129-15	Metering rod disk.....	.02
25-75S	Needle and seat assembly.....	.80	146-88S	Bowl cover assembly.....	1.30
30-14	Bowl strainer gauze.....	.10	150-62	Choke piston pin.....	.02
30-35	Pump strainer.....	.10	150-92	Anti-percolator pin.....	.02
30A-39	Idle adjustment screw.....	.30	150A-10	Pin spring.....	(3) .01
39-10	Choke valve attaching screw.....	(2) 2 for .05	150-67S	Vacuum piston and pin assembly.....	.30
39-11	Throttle valve attaching screw.....	(2) 2 for .05	160-75	Choke piston.....	.25
48-72	Pump jet.....	.25	170F-64S	Thermostatic coil and housing assembly.....	2.00
53A-199S	Pump arm and countershaft assembly.....	.50	172-21	Throttle connector rod retainer.....	.05
61-57	Adjustment screw spring.....	.05	181-53S	Fast idle cam and pin assembly.....	.20
61-63	Pump spring.....	.10	184-18S	Anti-percolator cap and rocker arm assembly.....	.25
61-75	Metering rod spring.....	.10			
61-175	Vacuum piston spring.....	.05			
61-188	Rocker arm spring.....	.10			
61-192	Needle pull clip.....	.05			
61-200	Plunger spring.....	.10			

*Gaskets so marked must be soaked in 90 proof denatured alcohol for 15 minutes, installed on part and let dry before using.

—Parts so marked are new and listed for the first time.

NOTE: Small figures in parentheses preceding list price indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

776S

Super 6—501, 5A, 1950-51
Commodore 6—502, 6A, 6B, 1950-52
Hornet 6—7A, 7B, 7C, 1951-53
Wasp—5B, 1952
Super Wasp—5C, 1953

773S

Super 8—503, 1950
Commodore 8—504, 8A, 8B, 1950-52



Cut Shows 776S

HUDSON SIX CYLINDER 1950-1953

EIGHT CYLINDER 1950-1952

WGD Dual Down-Draft Climatic® Control **Carburetors Nos. 773S (8) - 776S (6)**

CARBURETOR SPECIFICATIONS

For Hudson Hornet (776S) 6 Cylinder Engine: 3-13/16 Inch Bore, 4 1/2 Inch Stroke

For Hudson (776S) 6 Cylinder Engine: 3-9/16 Inch Bore, 4 3/8 Inch Stroke

For Hudson (773S) 8 Cylinder Engine: 3 Inch Bore, 4 1/2 Inch Stroke

Dimensions: Flange size, 1 1/4 inch dual, 4 bolt type.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 2 1/32 inch I. D.

Main venturi, 1-3/16 inch I. D.

Float Level: Distance from float to bowl cover, when needle is seated to be 3/16 inch. Use gauge No. T109-28.

Vents: Outside, No. 10 (.1935") drill. Inside, none.

Gasoline Intake: Square vertical (push-pull) needle. Seat size No. 42 drill.

Low Speed Jet Tube: Jet size, No. 66 (.033") drill.

By-pass, size No. 55 (.052") drill.

Economizer, size 1.15 mm (.045") drill.

Idle bleed, size No. 56 (.0465") drill.

Idle Ports: Upper port, slot type, length .200 inch. Width .030 inch.

Idle Port Opening: .157 to .163 inch above upper edge of valve with valve closed tight.

Lower Port (For Idle Adjustment Screw): Size, .0615 to .0655 inch diameter.

Set Idle Adjustment Screw: 1/2 to 1 turn open. For richer mixture turn screw out. Idle engine between 540-560 r.p.m. (Synco-Mesh Trans.), 490-510 (Hydra-Matic Trans.).

Nozzle: In primary venturi, round end type. Inside diameter, No. 30 drill. Nozzle is installed permanently. Do not remove. Anti-percolating well; jet size, No. 66 drill.

Metering Rod (Vacumeter Type): (773S) Economy step, .068 inch diameter. Middle step tapers to .063 inch diameter. Power step .044 inch diameter. (776S) Economy step .067 inch diameter. Middle step tapers to .060 inch diameter. Power step .045 inch diameter. Length 2-59/64 inches.

Metering Rod Jet: .089 inch diameter.

Metering Rod Setting: After adjusting for pump stroke, set metering rod as follows: With throttle tightly closed, hold metering rods (assembled on vacumeter link) in maximum down position, tighten clamp screw securely with metering rod arm contacting vacumeter link.

Accelerating Pump: Pressure type delayed action plunger.

Discharge jet (twin) size No. 74 drill.

Pump jet air bleed passage to outside: 1/8" drill.

Intake ball check, size No. 40 (.098") drill

Discharge (needle seat) size No. 50 (.070") drill.

Pump Adjustment: "43" as indicated on gauge T109-117S with throttle valves seated in bores of carburetor or 1/2 inch from top of dust cover boss to top of plunger shaft.

Choke: Carter Climatic® Control—set on index (773S); set two points lean (776S). Butterfly type, offset valve. Choke heat suction hole in body, size No. 36 drill.

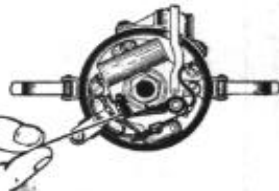
Vacuum Spark Port: .039 to .041 inch diameter. Top of port .020 to .030 inch above valve.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



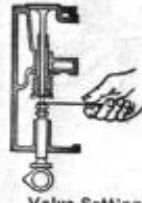
Spark Plug
Gap
.032"



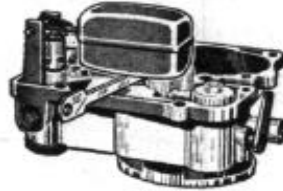
Breaker Point
Setting
6 Cyl.—.020"
8 Cyl.—.017"



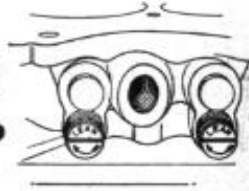
Ignition Timing
Breaker Points to Open:
T. D. C.



Valve Setting
(Hot)
Intake .008" (1950-52)
.010" (1953)
Exhaust .010" (1950-52)
.012" (1953)



Float Setting
3/16 Inch
(Use Gauge T109-28)



Idle Adjustment
Screw Setting
1/2 to 1
Turn Open

CARBURETER ADJUSTMENTS

FLOAT ADJUSTMENT (Fig. 1):

With bowl cover gasket removed, bowl cover inverted and needle seated, there should be $3/16$ inch (gauge T109-28) between top of float and bowl cover. Adjust by bending float arm.

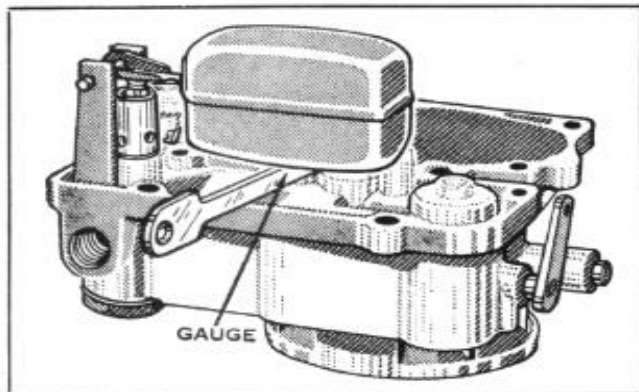


Figure 1
Float Adjustment

PUMP ADJUSTMENT (Fig. 2):

Back out throttle lever set screw until throttle valves seat in bores of carburetor. Place Universal pump travel gauge T109-117S inverted on edge of dust cover boss of bowl cover. Turn knurled nut of gauge until finger on gauge just touches top of plunger shaft (A). Number indicated on gauge should be "43". Adjust by bending throttle connector rod at upper angle (B).
Optional Adjustment: The distance from the dust cover boss to the top of the plunger shaft should be $1/2$ inch (C). Adjust as mentioned above.

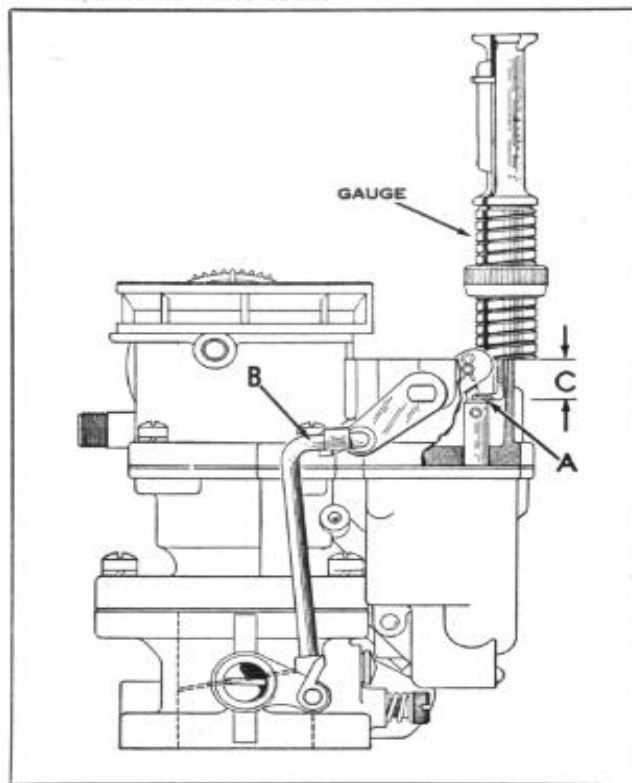


Figure 2
Pump Adjustment

METERING ROD ADJUSTMENT (Fig. 3):

The metering rods must be adjusted after the pump adjustment or when leaner than standard rods are installed. No metering rod gauges are necessary; procedure is as follows: With the throttle lever set screw backed out and throttle valves seated in bores of carburetor, press down on vacuum link (D) until metering rods bottom in casting at (E). With rods held in this position, revolve metering rod arm (F) until lip contacts vacuum link at (G). Hold in place and carefully tighten metering rod arm set screw (H).

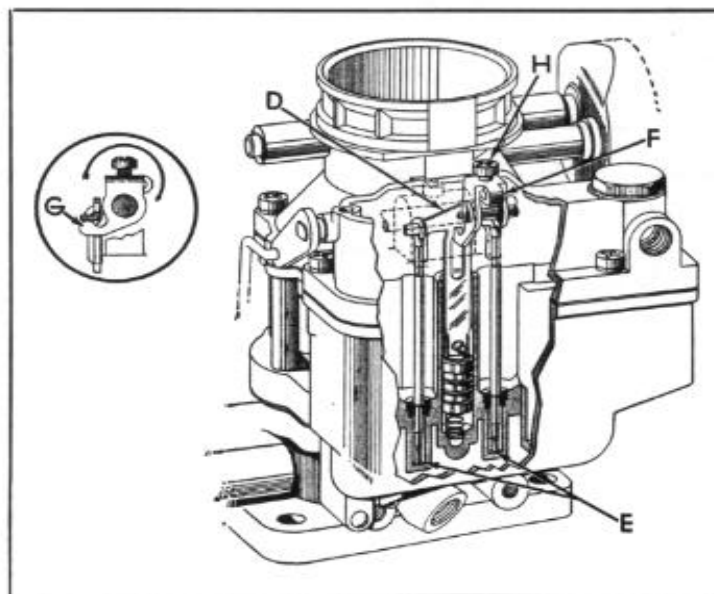


Figure 3
Metering Rod Adjustment

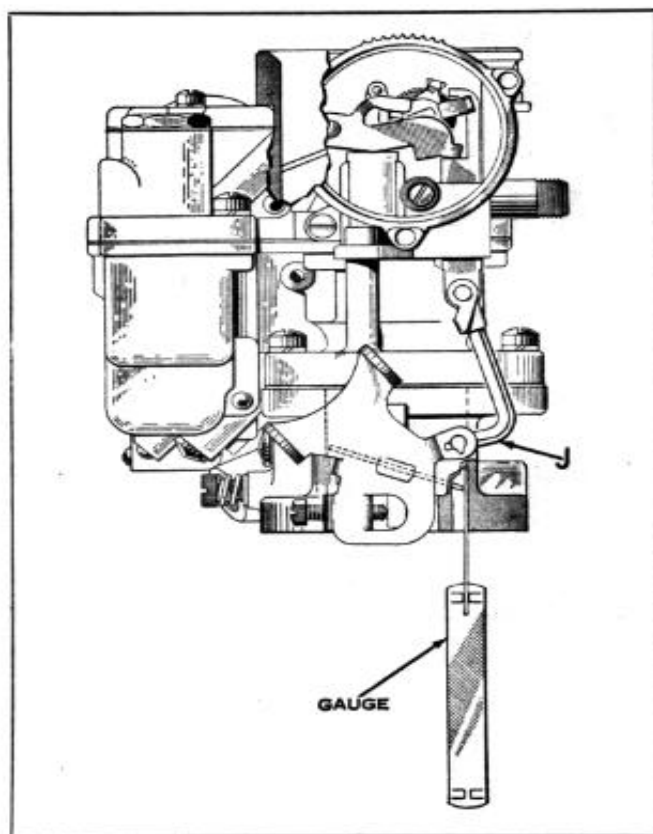


Figure 4
Fast Idle Adjustment

FAST IDLE ADJUSTMENT (Fig. 4):

With the thermostatic coil housing gasket and baffle plate removed, crack throttle valve and hold choke valve closed. Then close throttle. There should now be .026" clearance (gauge T109-189) between throttle valve and bore of carburetor (side opposite idle port). Adjust by bending the choke connector rod at lower angle (J).

UNLOADER ADJUSTMENT (Fig. 5):

Must be made after fast idle adjustment. Hold throttle valve wide open and close choke valve as far as possible without forcing; there should now be 5/32 inch (gauge T109-154) clearance between upper edge of choke valve and inner wall of air horn (K). Adjust by bending arm on choke trip lever (L) (tool T109-187).

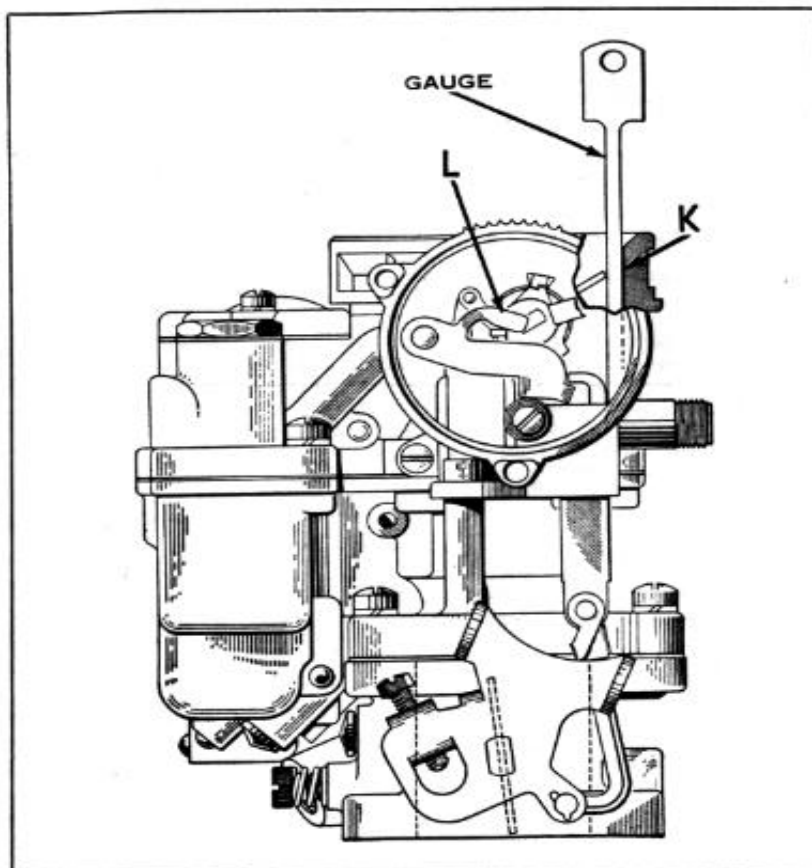
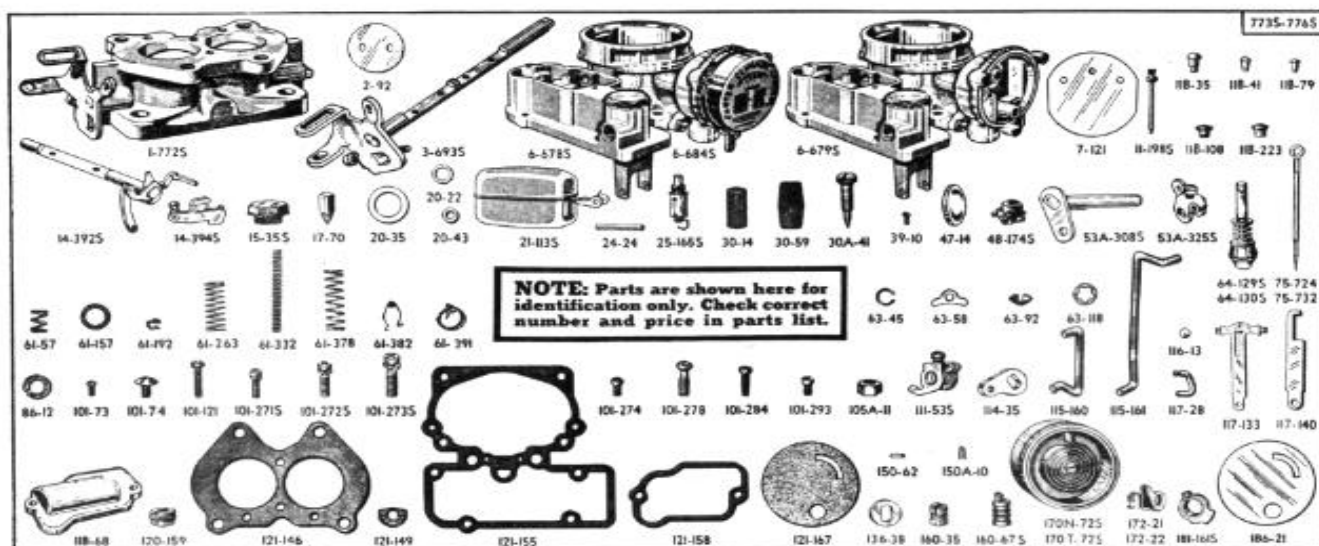


Figure 5
Unloader Adjustment



Hudson—1950-1953—Carburetors Nos. 773S-776S

WHEN SERVICING, USE GASKET ASSORTMENT No. 196; REPAIR PACKAGE No. 1554A (773S), No. 1555B (776S)

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-772S	Body flange assembly	75-732	†Metering rod, 1 size lean (776S)
2-92	Throttle valve	75-741	Metering rod, 2 sizes lean (776S)
3-693S	Throttle shaft and lever assembly	75-742	Metering rod, 3 sizes lean (776S)
6-678S	Air horn and Climatic® control assembly (773S)	75-744	Metering rod, 1 size lean (773S)
6-679S	Air horn and piston housing assembly	75-745	Metering rod, 2 sizes lean (773S)
6-684S	Air horn and Climatic® control assembly (776S)	75-746	Metering rod, 3 sizes lean (773S)
7-121	Choke valve	75-754	METERING ROD, STANDARD (776S)
11-198S	LOW SPEED JET ASSEMBLY	86-12	Flange stud lock washer
11B-35	Rivet plug	101-73	Throttle valve attaching screw
11B-41	Rivet plug	101-74	Throttle shaft arm attaching screw
11B-79	Rivet plug	101-121	Throttle lever adjustment screw
11B-108	IDLE PORT RIVET PLUG	101-236	Metering rod arm clamp screw (Sup. by 101-293)
14-392S	NOZZLE RIVET PASSAGE PLUG	101-271S	Attaching screw and washer assembly
14-394S	Choke piston lever, link and shaft assembly	101-272S	Air horn attaching screw and washer assembly
16-33S	Choke trip lever and pin assembly	101-273S	Body flange attaching screw and washer assembly
17-70	Strainer nut assembly	101-274	Coil housing attaching screw
20-22	PUMP CHECK NEEDLE	101-278	Pump jet housing attaching screw
20-35	Needle seat gasket	101-284	Piston housing attaching screw
20-43	BOWL STRAINER GASKET	101-293	Metering rod arm clamp screw
21-113S	Piston housing gasket	105A-11	Flange stud nut
21-113S	Float and lever assembly	111-53S	Metering rod arm and screw assembly
24-24	Float lever pin	114-35	THROTTLE SHAFT ARM
25-166S	Needle and seat assembly (Sup. by 25-186S)	115-160	Choke connector rod
25-186S	NEEDLE AND SEAT ASSEMBLY	115-161	THROTTLE CONNECTOR ROD
30-14	BOWL COVER STRAINER	116-13	PUMP INTAKE CHECK BALL
30-59	STRAINER	117-28	Pump arm link
30A-41	Idle adjustment screw	117-133	Vacuum piston link
39-10	Choke valve attaching screw	117-140	Fast idle link
47-14	Choke cylinder wench plug	118-68	Dust cover
48-174S	Pump jet and housing assembly	120-159	METERING ROD JET
53A-308S	Pump operating lever and countershaft assembly	121-146	BODY FLANGE GASKET
53A-326S	Pump arm and screw assembly	121-149	Pump jet gasket
61-57	Idle adjustment screw lock spring	121-155	AIR HORN GASKET
61-157	Plunger spring	121-158	DUST COVER GASKET
61-192	Needle pull clip	121-167	COIL HOUSING GASKET
61-263	PUMP SPRING (LOWER)	136-38	Throttle shaft washer
61-332	VACUUM PISTON SPRING	150-62	Choke piston pin
61-378	Pump spring (upper)	150A-10	Pin spring
61-382	METERING ROD SPRING	160-35	Choke piston
61-391	Fast idle cam spring	160-67S	Vacuum piston and pin assembly
63-45	PUMP CHECK BALL RETAINER RING	170N-72S	Thermostatic coil and housing assembly (776S)
63-58	Coil housing retainer	170T-72S	Thermostatic coil and housing assembly (773S)
63-92	Pump spring retainer (Sup. by 63-149)	172-21	Throttle connector rod retainer
63-118	Throttle shaft retaining ring	172-22	THROTTLE AND CHOKE CONNECTOR ROD RETAINER
63-149	Pump spring retainer	181-161S	Fast idle cam assembly
64-129S	Plunger rod, spring and retainer assembly (776S) (Sup. by 64-132S)	186-21	Baffle plate
64-130S	Plunger rod, spring and retainer assembly (773S) (Sup. by 64-133S)		
64-132S	PLUNGER ROD, SPRING AND RETAINER ASSEMBLY (776S)		
64-133S	PLUNGER ROD, SPRING AND RETAINER ASSEMBLY (773S)		
75-724	METERING ROD, STANDARD (773S)		

†Used in early production as standard metering rod for 776S.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

MODELS

Pacemaker

"500" — 1950

"4A" — 1951

"4B" — 1952

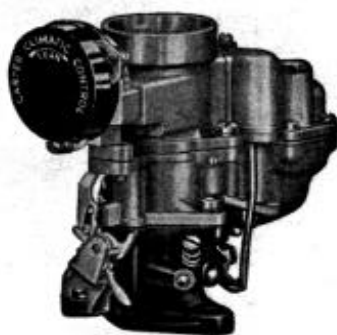
"4C" — 1953

Pacemaker Deluxe

"50A" — 1950

Wasp

"4D" — 1954



Casting No. 682 on face of flange

HUDSON

1950-1954

WAI Down-Draft Climatic® Control Carburetor—Model 749S

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3-9/16 Inch Bore, 3 3/8 Inch Stroke

Dimensions: Flange size, 1 1/2 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

Main venturi, 1 3/8 inch I. D.

Float Level: Distance from seam of float (at free end) to tip on lower edge of float chamber cover, when needle is seated to be 1/2 inch.

Vents: Outside, No. 10 drill. Inside, none.

Gasoline Intake: Square vertical needle. Size No. 46 (.081" I drill hole in needle seat.

Low Speed Jet Tube: Jet size, No. 65 drill. By-pass, size 1.6 mm drill. Economizer, in body, .0545-.0555 inch diameter. Idle bleed, size No. 52 drill.

Idle Port: Length .190 inch; width .040 inch.

Idle Port Opening: .136 to .140 inch above valve with valve closed tight.

Idle Screw Seat: No. 46 drill.

Set Idle Adjustment Screw: 1/2 to 1 1/2 turns open. For richer mixture turn screw out. Do not idle engine below 500 r.p.m. (Hydra-Matic—In Drive Range), 550 r.p.m. (Standard and Overdrive Trans.).

Main Nozzle: (Assembly) Slip nozzle, flush type, (angle tip) seats in primary venturi, at 45° angle. Discharge jet size, .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120") drill.

Metering Rod (Vacumeter Type): Economy step, .0745 inch diameter; middle step tapers to .066 inch; power step, .040 inch diameter. Length, 3-9/64 inches.

Metering Rod Jet: .1015 inch diameter.

Metering Rod Setting: Use gauge, part No. T109-102 (2.468 inches).

Accelerating Pump: Pressure type with adjustable stroke. Discharge jet, size No. 72 drill. Intake ball check, size No. 60 drill. Discharge ball check, size No. 32 drill. Relief passage (to outside), size No. 42 drill.

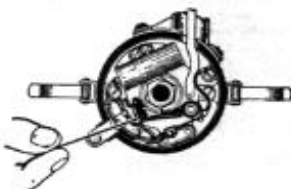
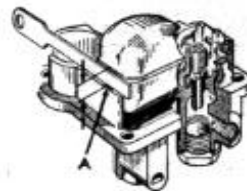
Pump Adjustment: 16/64 inch plunger travel (full throttle position) medium stroke. Use gauge No. T109-117S.

Choke: Carter Climatic® Control, set at index. Butterfly type, offset valve. Choke Heat Suction Hole, in body, size No. 30 drill.

Vacuum Spark Port: .054-.057 inch diameter. Bottom of port .020 inch above valve.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.

Spark Plug
Gap
.032"Breaker Point
Setting
.020"Ignition Timing
Breaker Points to Open:
T. D. C.Valve Setting
(Hot)
Intake:
.008" (1950-52, 1954)
.010" (1953)
Exhaust:
.010" (1950-52, 1954)
.012" (1953)Float Setting
(Measure from point "A"
to top of float seam)
1/2 InchIdle Adjustment
Screw Setting
1/2 to 1 1/2
Turns Open

CARBURETOR ADJUSTMENTS

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64" from closed to wide open throttle position.

Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge

vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64").

Adjust by bending throttle connector rod at lower angle.

METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed.

CARBURETOR

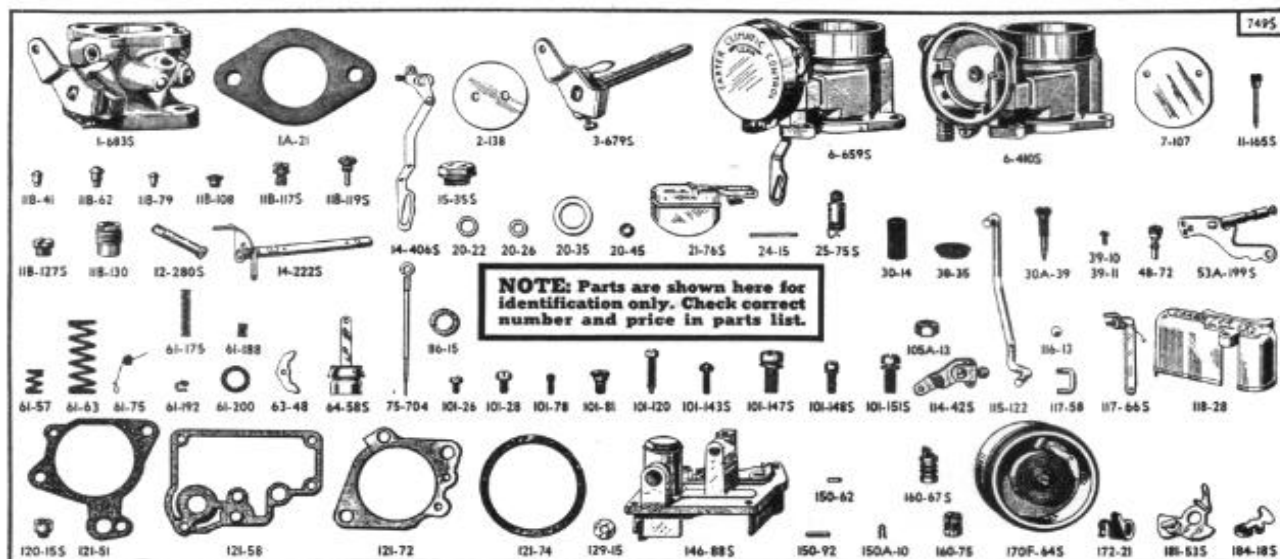
TRADE MARK REG. U. S. PAT. OFF.
MARCA REGISTRADAPRINTED
U. S. A.

Insert gauge (tool No. T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link, directly over piston until it contacts the pump arm. There should now be less than .005" clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring. **ANTI-PERCOLATOR ADJUSTMENT:** Crack throttle valve .020" by placing gauge T109-29 between throttle valve and bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .005" to .015" between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw.

There should now be 5/8" clearance between inside wall of air horn and lower edge of choke valve. (Use tool T109-85.) Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be 7/16" clearance between lower edge of choke valve and inner wall of air horn (T109-80). Adjust by bending cam on throttle lever (T109-41).



Hudson 6—1950-1954—No. 749S

WHEN SERVICING, USE GASKET ASSORTMENT No. 198; REPAIR PACKAGE No. 1535

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME
1-683S	Body flange assembly.....
1A-21	Flange gasket.....
2-138	Throttle valve.....
3-679S	Throttle shaft and lever assembly (Sup. by 3-786S).....
3-786S	Throttle shaft and lever assembly.....
6-410S	Air horn and piston housing assembly.....
6-659S	Air horn assembly.....
7-107	Choke valve.....
11-165S	LOW SPEED JET ASSEMBLY.....
11B-41	Rivet plug.....
11B-62	Body flange rivet plug.....
11B-79	Rivet plug..... (5)
11B-108	Idle port rivet plug.....
11B-117S	Idle passage plug assembly.....
11B-119S	Ball retainer screw plug assembly.....
11B-127S	Passage plug assembly..... (2)
11B-130	Nozzle retainer plug.....
12-280S	Nozzle assembly.....
14-222S	Choke piston lever, link and shaft assembly.....
14-406S	Choke lever, screw and link assembly.....
15-35S	Strainer nut assembly.....
20-22	Gasket..... (3)
20-26	Gasket..... (3)
20-35	BOWL STRAINER GASKET.....
20-45	NOZZLE GASKET.....
21-76S	Float and lever assembly.....
24-15	Float lever pin.....
25-75S	NEEDLE AND SEAT ASSEMBLY.....
30-14	BOWL STRAINER GAUZE.....
30-35	PUMP STRAINER.....
30A-39	Idle adjustment screw.....
39-10	CHOKE VALVE ATTACHING SCREW..... (2)
39-11	THROTTLE VALVE ATTACHING SCREW..... (2)
48-72	PUMP JET.....
53A-199S	Pump arm and countershaft assembly.....
61-67	Adjustment screw spring.....
61-63	Pump spring.....
61-75	Metering rod spring.....
61-175	VACUUM PISTON SPRING.....
61-188	Rocker arm spring.....
61-192	Needle pull clip.....
61-200	Plunger spring.....
63-48	Housing retainer.....
64-58S	PLUNGER AND ROD ASSEMBLY (Identify by shaft No. 149-108)..... (3)
75-704	METERING ROD—STANDARD—.0745"-.0745" to .066"-.040".....

Part No.	PART NAME
75-712	Metering rod—1 size lean—.075"-.075" to .0675"-.043".....
75-713	Metering rod—2 sizes lean—.0755"-.0755" to .068"-.048".....
75-714	Metering rod—3 sizes lean—.076"-.076" to .0705"-.049".....
86-15	Flange stud lock washer..... (2)
101-26	Coil housing attaching screw..... (3)
101-28	Throttle shaft arm clamp screw.....
101-78	Choke lever clamp screw.....
101-81	Fast idle cam screw.....
101-120	Throttle lever adjusting screw.....
101-143S	Piston housing attaching screw and washer assembly.....
101-147S	Body flange attaching screw and washer assembly..... (2)
101-148S	Bowl cover attaching screw and washer assembly..... (5)
101-151S	Air horn attaching screw and washer assembly..... (2)
105A-13	Flange nut.....
114-42S	THROTTLE SHAFT ARM AND SCREW ASSEMBLY..... (2)
115-122	THROTTLE CONNECTOR ROD.....
116-13	PUMP INTAKE AND DISCHARGE CHECK BALL..... (3)
117-58	PUMP CONNECTOR LINK.....
117-66S	Piston link and spring assembly.....
118-28	Dust cover.....
120-15S	METERING ROD JET ASSEMBLY.....
121-51	AIR HORN GASKET.....
121-58	BOWL GASKET.....
121-72	BODY FLANGE GASKET.....
121-74	COIL HOUSING GASKET.....
129-15	Metering rod disk.....
146-88S	Bowl cover assembly.....
150-62	Choke piston pin.....
150-92	Anti-percolator pin.....
150A-10	PIN SPRING..... (3)
160-67S	Vacuum piston and pin assembly.....
160-75	Choke piston.....
170F-64S	Thermostatic coil and housing assembly.....
172-21	THROTTLE CONNECTOR ROD RETAINER.....
181-53S	Fast idle cam and pin assembly.....
184-18S	ANTI-PERCOLATOR CAP AND ROCKER ARM ASSEMBLY.....

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

HUDSON

"WASP"

Model 5B - 1952

(Two Carbureters Per Engine)

WAI Down-Draft Climatic Control Carbureter No. 9905

CARBURETER SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3-9/16 Inch Bore, 4 3/8 Inch Stroke

Dimensions: Flange size, 1 1/4 inch S. A. E.
Primary venturi, 1 1/32 inch I. D.
Secondary venturi, 1 1/16 inch I. D.
Main venturi, 1 3/8 inch I. D.

Float Level: Distance from seam of float (at free end) to tip on lower edge of float chamber cover, when needle is seated to be 1/2 inch.

Vents: Outside, No. 10 (.1935 inch) drill. Inside, none.

Gasoline Intake: Square vertical push-pull needle. Size No. 46 (.081 inch) drill hole in needle seat.

Low Speed Jet Tube: Jet size No. 65 (.035 inch) drill. By-pass size No. 53 (.0595 inch) drill. Economizer, in body, .0545-.0555 inch diameter. Idle bleed, size No. 53 (.0595 inch) drill.

Idle Port: Length .165 inch; width .030 inch.

Idle Port Opening: .120 to .124 inch above valve with valve tightly closed.

Idle Screw Seat: No. 46 (.081 inch) drill.

Set Idle Adjustment Screw: 3/4 to 1 3/4 turns open. For richer mixture, turn screw out. Do not idle engine below 500 R.P.M. (Hydra-Matic), 550 R.P.M. (Stand. Trans.), 575 R.P.M. (Over-drive Trans.).

Main Nozzle: (Assembly) Slip nozzle, flush type, (angle tip) seats in primary venturi, at 45° angle. Discharge jet size, .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.

Metering Rod (Vacumeter Type): Economy step, .075 inch diameter; middle step tapers to .059 inch; power step, .055 inch diameter. Length 3-9/64 inches.

Metering Rod Jet: .1015 inch diameter.

Metering Rod Setting: Use gauge, part No. T109-102 (2.468 inches).

Accelerating Pump: Pressure type (spring operated lever) with adjustable stroke.

Discharge jet, Size No. 74 (.0225 inch) drill. Intake ball check seat, size No. 60 (.040 inch) drill. Discharge ball check seat, size No. 32 (.116 inch) drill. Relief passage (to outside), size No. 42 (.0935 inch) drill.

Pump Adjustment: See Adjustments.

Choke: Carter Climatic Control, set 1 point lean—butterfly type, offset valve. Choke Heat Suction Hole, in body, size No. 40 (.098 inch) drill.

Vacuum Spark Port: .051-.054 inch diameter. Top of port .040 inch above top edge of valve.

MOTOR TUNE-UP

Spark Plug	Breaker Point	Ignition Timing	Valve Setting	Float Setting	Idle Adjustment
Gap	Setting	Breaker Points to Open:	(Hot)	1/2 Inch	Screw Setting
.032"	.020"	T. D. C.	Intake .010"	(Use Gauge T109-83)	3/4 to 1 3/4
			Exhaust .012"		Turns Open

CARBURETER ADJUSTMENTS

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64" from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64"). Adjust by bending throttle connector rod at lower angle.

METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert gauge (tool T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .005" clearance between metering rod pin and shoulder in notch

of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .020" by placing gauge T109-29 between throttle valve and bore of carbureter (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .005" to .015" between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw. There should now be 1/2" clearance (gauge T109-83) between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be 9/16" clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (use tool T109-41).

PARTS LIST

WHEN SERVICING, USE GASKET ASSORTMENT No. 139A

Part No.	PART NAME	Part No.	PART NAME
1-971S	—Body flange assembly.....	64-55S	Plunger and rod assembly.....
1A-17	Flange gasket.....	75-851	—Metering rod—standard.....
2-130	Throttle valve.....	75-856	—Metering rod—1 size lean.....
3-795S	—Throttle shaft and lever assembly.....	75-857	—Metering rod—2 sizes lean.....
6-410S	Air horn assembly.....	75-858	—Metering rod—3 sizes lean.....
6-810S	Air horn and climatic control assembly.....	75-882U	—Unitized package (consists of 1—75-857 and 1—75-858).....
7-107	Choke valve.....	86-15	Flange stud lock washer.....(2)
11-206S	Low speed jet assembly.....	101-26	Coil housing attaching screw.....(3)
11B-41	Nozzle passage rivet plug.....	101-28	Throttle shaft arm clamp screw.....
11B-42	Rivet plug.....	101-78	Choke lever clamp screw.....
11B-79	Rivet plug.....(5)	101-81	Fast idle cam screw.....
11B-108	Idle port rivet plug.....	101-87	Throttle valve attaching screw.....(2)
11B-117S	Idle passage plug assembly.....	101-120	Throttle lever adjusting screw.....
11B-119S	Ball retainer screw plug assembly.....	101-143S	Piston housing attaching screw and washer assembly.....
11B-127S	Passage plug assembly.....(2)	101-147S	Body flange attaching screw and washer assembly.....(2)
11B-130	Nozzle retainer plug.....	101-148S	Bowl cover attaching screw and washer assembly.....(5)
12-280S	Nozzle assembly.....	101-151S	Air horn attaching screw and washer assembly.....(2)
14-222S	Choke piston lever, link and shaft assembly.....	105A-13	Flange stud nut.....(2)
14-406S	Choke lever, screw and link assembly.....	114-42S	Throttle shaft arm and screw assembly.....
15-35S	Strainer nut assembly.....	115-122	Throttle connector rod.....
20-22	Needle seat and plug gasket.....(3)	116-13	Pump intake and discharge check ball.....
20-26	Metering rod jet and plug gasket.....(3)	117-58	Pump connector link.....
20-35	Bowl strainer gasket.....	117-66S	Piston link and spring assembly.....
20-45	Nozzle gasket.....	118-28	Dust cover.....
21-76S	Float and lever assembly.....	120-15S	Metering rod jet assembly.....
24-15	Float lever pin.....	121-51	Air horn gasket.....
25-75S	Needle and seat assembly.....	121-58	Bowl cover gasket.....
30-14	Bowl strainer gauze.....	121-72	Body flange gasket.....
30-34	Pump strainer.....	121-74	Coil housing gasket.....
30A-39	Idle adjustment screw.....	129-15	Metering rod disk.....
39-10	Choke valve attaching screw.....(2)	146-88S	Bowl cover end strainer assembly.....
48-74	Pump jet.....	150-62	Choke piston pin.....
53A-211S	Pump operating lever and countershaft assembly.....	150-92	Anti-percolator pin.....
53A-289S	Pump arm and collar assembly.....	150A-10	Pin spring.....(3)
61-57	Idle adjustment screw spring.....	160-67S	Vacuum piston and pin assembly.....
61-75	Metering rod spring.....	160-75	Choke piston.....
61-143	Plunger spring.....	170G-64S	Thermostatic coil and housing assembly.....
61-171	Pump spring.....	172-21	Throttle connector rod retainer.....
61-178	Vacuum piston spring.....	181-67S	Fast idle cam and pin assembly.....
61-188	Rocker arm spring.....	184-18S	Anti-percolator cap and rocker arm assembly.....
61-211	Pump operating lever spring.....		
63-45	Ball retainer ring.....		
63-48	Coil housing retainer.....(3)		

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

(Two Carbureters Per Engine)



Casting No. 910 on face of flange

HUDSON "HORNET" Model 7B 1952

WAI Down-Draft Climatic Control Carburetor No. 9685

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3-13/16 Inch Bore, 4 1/2 Inch Stroke

Dimensions: Flange size, 1 1/2 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

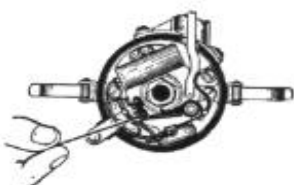
Main venturi, 1 3/8 inch I. D.

Float Level: Distance from seam of float (at free end) to tip on lower edge of float chamber cover, when needle is seated, to be 1/2 inch.**Vents:** Outside, No. 10 (.1935 inch) drill. Inside, none.**Gasoline Intake:** Square vertical push-pull needle. Size No. 46 (.081 inch) drill hole in needle seat.**Low Speed Jet Tube:** Jet size No. 65 (.035 inch) drill. By-pass, size .063 inch drill. Economizer, in body, .0545-.0555 inch diameter. Idle bleed, size No. 52 (.0635 inch) drill.**Idle Port:** Upper port, slot type, length .190 inch; width .040 inch.**Idle Port Opening:** .178 to .182 inch above valve with valve tightly closed.**Idle Screw Seat:** No. 46 (.084 inch) drill.**Set Idle Adjustment Screw:** 1 1/4 to 2 1/4 turns open. For richer mixture, turn screw out. Do not idle engine below 500 R.P.M. (Hydra-Matic). 550 R.P.M. (Stand, Trans.).**Main Nozzle: (Assembly)** Slip nozzle, flush type, (angle tip) seats in primary venturi, at 45° angle. Discharge jet size, .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.**Metering Rod (Vacumeter Type):** Economy step, .076 inch diameter; middle step tapers to .063 inch; power step, .056 inch diameter. Length, 3-9/64 inches.**Metering Rod Jet:** .1015 inch diameter.**Metering Rod Setting:** Use gauge, part No. T109-102 (2.468 inches).**Accelerating Pump:** Pressure type with adjustable stroke. Discharge jet, Size No. 74 (.0225 inch) drill. Intake ball check seat, size No. 60 (.040 inch) drill. Discharge ball check seat, size No. 32 (.116 inch) drill. Relief passage (to outside), size No. 42 (.0935 inch) drill.**Pump Adjustment:** See Adjustments.**Choke:** Carter Climatic Control, set 1 point lean—butterfly type, offset valve. Choke Heat Suction Hole, in body, size No. 40 (.098 inch) drill.**Vacuum Spark Port:** .054-.057 inch diameter. Top of port .049 inch above top edge of valve, with valve tightly closed.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.

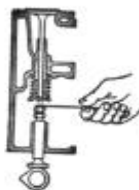
Spark Plug
Gap
.032"



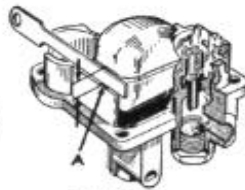
Breaker Point
Setting
.020"



Ignition Timing
Breaker Points to Open:
T. D. C.



Valve Setting
(Hot)
Intake .010"
Exhaust .012"



Float Setting
Measure from point "A"
to top of float seam
1/2 Inch
(Use Gauge T109-83)



Idle Adjustment
Screw Setting
1 1/4 to 2 1/4
Turns Open

CARBURETOR ADJUSTMENTS

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64" from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion

of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64"). Adjust by bending throttle connector rod at lower angle.

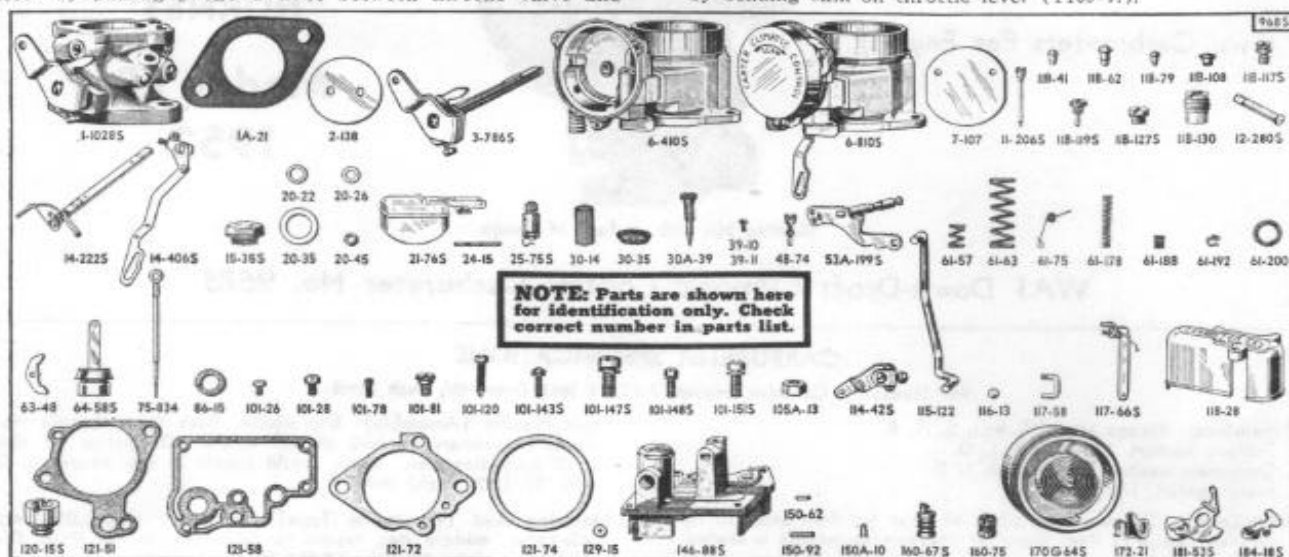
METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert gauge (tool T109-108) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .005" clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .016" by placing gauge T109-44 between throttle valve and

bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .015" between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw. There should now be 5/8" (T109-85) clearance between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be 9/16" clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (T109-41).



Hudson—1952—Carburetor No. 9685

WHEN SERVICING, USE GASKET ASSORTMENT No. 198; REPAIR PACKAGE No. 1723

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-9085	Body flange assembly [Sup. by 1-10285]	64-585	PLUNGER AND ROD ASSEMBLY
1-10285	—Body flange assembly	75-834	—METERING ROD—STANDARD
1A-21	FLANGE GASKET	75-861	—Metering rod—1 size lean
2-138	Throttle valve	75-862	—Metering rod—2 sizes lean
3-7865	—Throttle shaft and lever assembly	75-863	—Metering rod—3 sizes lean
6-4105	Air horn assembly	75-881U	—Unitized package (consists of 1—75-862 and 1—75-863)
6-8105	—Air horn and climatic control assembly	86-15	Flange stud lock washer (2)
7-107	Choke valve	101-26	Coil housing attaching screw (3)
11-2065	LOW SPEED JET ASSEMBLY	101-28	Throttle shaft arm clamp screw
11B-41	Rivet plug	101-78	Choke lever clamp screw
11B-62	Rivet plug	101-81	Fast idle cam screw
11B-79	Rivet plug (5)	101-120	Throttle lever adjusting screw
11B-108	IDLE PORT RIVET PLUG	101-1435	Piston housing attaching screw and washer assembly
11B-1175	Idle passage plug assembly	101-1475	Body flange attaching screw and washer assembly (2)
11B-1195	Ball retainer screw plug assembly	101-1485	Bowl cover attaching screw and washer assembly (5)
11B-1275	Passage plug assembly (2)	101-1515	Air horn attaching screw and washer assembly (2)
11B-130	NOZZLE RETAINER PLUG	105A-13	Flange stud nut (2)
12-2805	NOZZLE ASSEMBLY	114-425	THROTTLE SHAFT ARM AND SCREW ASSEMBLY
14-2225	Choke piston lever, link and shaft assembly	115-122	THROTTLE CONNECTOR ROD
14-4065	Choke lever, screw and link assembly	116-13	PUMP INTAKE AND DISCHARGE CHECK BALL (2)
15-355	Strainer nut assembly	117-58	PUMP CONNECTOR LINK
20-22	Needle seat and plug gasket (3)	117-665	Piston link and spring assembly
20-26	Metering rod jet and plug gasket (3)	118-28	Dust cover
20-35	BOWL STRAINER GASKET	120-155	METERING ROD JET ASSEMBLY
20-45	NOZZLE GASKET	121-51	AIR HORN GASKET
21-765	Float and lever assembly	121-58	BOWL COVER GASKET
24-15	Float lever pin	121-72	BODY FLANGE GASKET
25-755	NEEDLE AND SEAT ASSEMBLY	121-74	COIL HOUSING GASKET
30-14	BOWL STRAINER GAUZE	129-15	Metering rod disk
30-35	PUMP STRAINER	146-885	Bowl cover and strainer assembly
30A-39	Idle adjustment screw	150-62	Choke piston pin
39-10	Choke valve attaching screw (2)	150-92	Anti-percolator pin
39-11	THROTTLE VALVE ATTACHING SCREW (2)	150A-10	Pin spring (3)
48-74	PUMP JET	160-675	Vacuum piston and pin assembly
53A-1995	Pump arm and countershaft assembly	160-75	Choke piston
61-57	Idle adjustment screw spring	170G-645	Thermostatic coil and housing assembly
61-63	Pump spring	172-21	THROTTLE CONNECTOR ROD RETAINER
61-75	Metering rod spring	181-535	Fast idle cam and pin assembly
61-178	VACUUM PISTON SPRING	184-185	ANTI-PERCOLATOR CAP AND ROCKER ARM ASSEMBLY
61-188	Rocker arm spring		
61-192	Needle pull clip		
61-200	Plunger spring		
63-48	Coil housing retainer (3)		

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

990S

Models 5B, 4C—1952-1953

Model 5C—1953

2114S

Model 5D—1954

(Two Carbureters Per Engine)

HUDSON WASP AND SUPER WASP 1952-1954

WAI Down-Draft Climatic® Control Carbureters Nos. 990S-2114S

CARBURETER SPECIFICATIONS

For Hudson 6 Cylinder Engine (Models 5B, 5C and 5D): 3-9/16 Inch Bore, 4 3/8 Inch Stroke

For Hudson 6 Cylinder Engine (Model 4C): 3-9/16 Inch Bore, 3 7/8 Inch Stroke

Dimensions: Flange size, 1 1/4 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

Main venturi, 1 3/8 inch I. D.

Float Level: Distance from seam of float (at free end) to tip on lower edge of float chamber cover, when needle is seated, to be 1/2 inch.

Vents: Outside, No. 10 (.1935 inch) drill. Inside, none.

Gasoline Intake: Square vertical push-pull needle. Size No. 46 (.081 inch) drill hole in needle seat.

Low Speed Jet Tube: Jet, size (990S) No. 65 (.035 inch) drill; (2114S) No. 66 (.033 inch) drill. By-pass in body size No. 53 (.0595 inch) drill. Economizer, in body .0545-.0555 inch diameter. Idle bleed, in body, size No. 53 (.0595 inch) drill.

Idle Port: Length .165 inch; width .030 inch.

Idle Port Opening: .120 to .124 inch above valve with valve tightly closed.

Idle Screw Seat: No. 46 (.081 inch) drill.

Set Idle Adjustment Screw: 3/4 to 1 3/4 turns open. For richer mixture turn screw out. Do not idle engine below 500 r.p.m. (Hydra-Matic—in Drive Range); 550 r.p.m. (Standard and Overdrive Trans.).

Main Nozzle: (Assembly) Slip nozzle, flush type, (angle tip) seats in primary venturi, at 45° angle. Discharge jet size, .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.

Metering Rod (Vacumeter Type): Economy step (990S) .075 inch; (2114S) .0745 inch diameter. Middle step tapers to (.990S) .059 inch; (2114S) .066 inch diameter. Power step (990S) .055 inch; (2114S) .059 inch diameter.

Metering Rod Jet: .1015 inch diameter.

Metering Rod Setting: Use gauge, part No. T109-102 (2.458 inches).

Accelerating Pump: Pressure type (spring operated lever) with adjustable stroke.

Discharge jet, Size No. 74 (.0225 inch) drill. Intake ball check seat, size No. 60 (.040 inch) drill. Discharge ball check seat, size No. 32 (.116 inch) drill. Relief passage (to outside), size No. 42 (.0935 inch) drill.

Pump Adjustment: See Adjustments.

Choke: Carter Climatic® Control, set 1 point lean—butterfly type, offset valve. Choke Heat Suction Hole, in body, size No. 40 (.098 inch) drill.

Vacuum Spark Port: .051-.054 inch diameter. Top of port .040 inch above top edge of valve.

MOTOR TUNE-UP

Spark Plug	Breaker Point	Ignition Timing	Valve Setting	Float Setting	Idle Adjustment
Gap	Setting	Breaker Points to Open:	(Hot)	1/2 Inch	Screw Setting
.032"	.020"	T. D. C.	Intake .010"} 1952-53	(Use Gauge T109-83)	3/4 to 1 3/4
			Exhaust .012"} 1954		Turns Open
			Intake .008"} 1954		
			Exhaust .010"} 1954		

CARBURETER ADJUSTMENTS

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64" from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64"). Adjust by bending throttle connector rod at lower angle.

METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert gauge (tool T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .005" clearance between metering rod pin and shoulder in notch

of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .020" by placing gauge T109-29 between throttle valve and bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .005" to .015" between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw. There should now be 1/8" clearance (gauge T109-83) between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be 9/16" clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (use tool T109-41).

CARTER CARBURETOR CORPORATION, ST. LOUIS, MO., U. S. A.

Hudson—1952-1954—Carburetors Nos. 990S-2114S

WHEN SERVICING, USE GASKET ASSORTMENT No. 139A

Part No.	PART NAME	Part No.	PART NAME
1-971S	Body flange assembly (Sup. by 1-1029S) (990S).....	63-48	Coil housing retainer..... (3)
1-1029S	Body flange assembly.....	64-55S	Plunger and rod assembly.....
1A-17	Flange gasket.....	75-851	Metering rod—standard (990S).....
2-130	Throttle valve.....	75-856	Metering rod—1 size lean (990S).....
3-795S	Throttle shaft and lever assembly.....	75-857	Metering rod—2 sizes lean (990S).....
6-410S	Air horn assembly.....	75-858	Metering rod—3 sizes lean (990S).....
6-810S	Air horn and Climatic® control assembly.....	75-956	Metering rod—standard (2114S).....
7-107	Choke valve.....	75-977	Metering rod—1 size lean (2114S).....
11-206S	Low speed jet assembly (990S).....	75-978	Metering rod—2 sizes lean (2114S).....
11-258S	Low speed jet assembly (2114S).....	75-979	Metering rod—3 sizes lean (2114S).....
11B-41	Nozzle passage rivet plug.....	86-15	Flange stud lock washer..... (2)
11B-42	Rivet plug.....	101-26	Coil housing attaching screw..... (3)
11B-79	Rivet plug..... (5)	101-28	Throttle shaft arm clamp screw.....
11B-108	Idle port rivet plug.....	101-78	Choke lever clamp screw.....
11B-117S	Idle passage plug assembly.....	101-81	Fast idle cam screw.....
11B-119S	Ball retainer screw plug assembly.....	101-87	Throttle valve attaching screw..... (2)
11B-127S	Passage plug assembly..... (2)	101-120	Throttle lever adjusting screw.....
11B-130	Nozzle retainer plug.....	101-143S	Piston housing attaching screw and washer assembly
12-280S	Nozzle assembly.....	101-147S	Body flange attaching screw and washer assembly..... (2)
14-222S	Choke piston lever, link and shaft assembly.....	101-148S	Bowl cover attaching screw and washer assembly..... (5)
14-406S	Choke lever, screw and link assembly.....	101-151S	Air horn attaching screw and washer assembly..... (2)
15-35S	Strainer nut assembly.....	105A-13	Flange stud nut..... (2)
20-22	Needle seat and plug gasket..... (3)	114-42S	Throttle shaft arm and screw assembly.....
20-26	Metering rod jet and plug gasket..... (3)	115-122	Throttle connector rod.....
20-35	Bowl strainer gasket.....	116-13	Pump intake and discharge check ball.....
20-45	Nozzle gasket.....	117-58	Pump connector link.....
21-76S	Float and lever assembly.....	117-66S	Piston link and spring assembly.....
24-15	Float lever pin.....	118-28	Dust cover.....
25-75S	Needle and seat assembly.....	120-15S	Metering rod jet assembly.....
30-14	Bowl strainer gauze.....	121-51	Air horn gasket.....
30-34	Pump strainer.....	121-58	Bowl cover gasket.....
30A-39	Idle adjustment screw.....	121-72	Body flange gasket.....
39-10	Choke valve attaching screw..... (2)	121-74	Coil housing gasket.....
48-74	Pump jet.....	129-15	Metering rod disk.....
53A-211S	Pump operating lever and countershaft assembly.....	146-88S	Bowl cover and strainer assembly.....
53A-289S	Pump arm and collar assembly.....	150-62	Choke piston pin.....
61-57	Idle adjustment screw spring.....	150-92	Anti-percolator pin.....
61-75	Metering rod spring.....	150A-10	Pin spring..... (3)
61-171	Pump spring.....	160-67S	Vacuum piston and pin assembly.....
61-178	Vacuum piston spring.....	160-75	Choke piston.....
61-188	Rocker arm spring.....	170G-64S	Thermostatic coil and housing assembly.....
61-211	Pump operating lever spring.....	172-21	Throttle connector rod retainer.....
63-45	Ball retainer ring.....	181-67S	Fast idle cam and pin assembly.....
		184-18S	Anti-percolator cap and rocker arm assembly.....

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

968S—Models 7B, 7C
1952-1953

2113S—Model 7D—1954

Model 35560—1955

Model 35660—1956

(Two Carburetors Per Engine)



Casting No. 910 on face of flange

HUDSON
"HORNET"
1952-1956

WAI Down-Draft Climatic® Control Carburetors Nos. 968S-2113S

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3-13/16 Inch Bore, 4 1/2 Inch Stroke

Dimensions: Flange size, 1 1/2 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

Main venturi, 1 3/8 inch I. D.

Float Level: Distance from seam of float (at free end) to tip on lower edge of float chamber cover, when needle is seated, to be 1/2 inch.

Vents: Outside, No. 10 (.1935 inch) drill. Inside, none.

Gasoline Intake: Square vertical push-pull needle. Size No. 46 (.081 inch) drill hole in needle seat.

Low Speed Jet Tube: Jet, (968S) size No. 65 (.035 inch), (2113S) size No. 66 (.033 inch) drill. By-pass, in body, size .063 inch diameter. Economizer, in body, size .0545 to .0555 inch diameter. Idle bleed in body, size No. 52 (.0635 inch) drill.

Idle Port: Upper port, slot type, length .190 inch; width .040 inch.

Idle Port Opening: .178 to .182 inch above valve with valve tightly closed.

Idle Screw Seat: No. 46 (.084 inch) drill.

Set Idle Adjustment Screw: 1/4 to 2/4 turns open. For richer mixture turn screw out. Do not idle engine below 500 r.p.m. (Hydra-Matic—In Drive Range), 550 r.p.m. (Standard and Overdrive Trans.).

Main Nozzle: (Assembly) Slip nozzle, flush type, (angle tip) seats in primary venturi, at 45° angle. Discharge jet size, .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.

Metering Rod (Vacumeter Type): Economy step (968S) .076 inch; (2113S) .075 inch diameter. Middle step tapers to (968S) .063 inch; (2113S) .068 inch diameter. Power step (968S) .056 inch; (2113S) .059 inch diameter.

Metering Rod Jet: .1015 inch diameter.

Metering Rod Setting: Use gauge, part No. T109-102 (2.468 inches).

Accelerating Pump: Pressure type with adjustable stroke. Discharge jet, Size No. 74 (.0225 inch) drill. Intake ball check seat, size No. 60 (.040 inch) drill. Discharge ball check seat, size No. 32 (.116 inch) drill. Relief passage (to outside), size No. 42 (.0935 inch) drill.

Pump Adjustment: See Adjustments.

Choke: Carter Climatic® Control, set 1 point lean—butterfly type, offset valve. Choke Heat Suction Hole, in body, size No. 40 (.098 inch) drill.

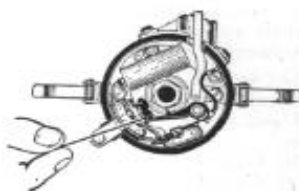
Vacuum Spark Port: .054-.057 inch diameter. Top of port .049 inch above top edge of valve, with valve tightly closed.

Motor Tune-Up—Be Accurate!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



Spark Plug
Gap
.032"



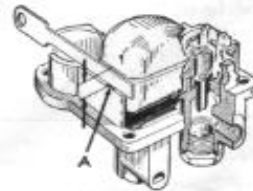
Breaker Point
Setting
.020"



Ignition Timing
Breaker Points to Open:
T. D. C.



Valve Setting
(Hot)
Intake .010"
Exhaust .012"



Float Setting
Measure from point "A"
to top of float seam
1/2 Inch
(Use Gauge T109-83)



Idle Adjustment
Screw Setting
1/4 to 2/4
Turns Open

CARBURETOR ADJUSTMENTS

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64" from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion

of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64"). Adjust by bending throttle connector rod at lower angle.

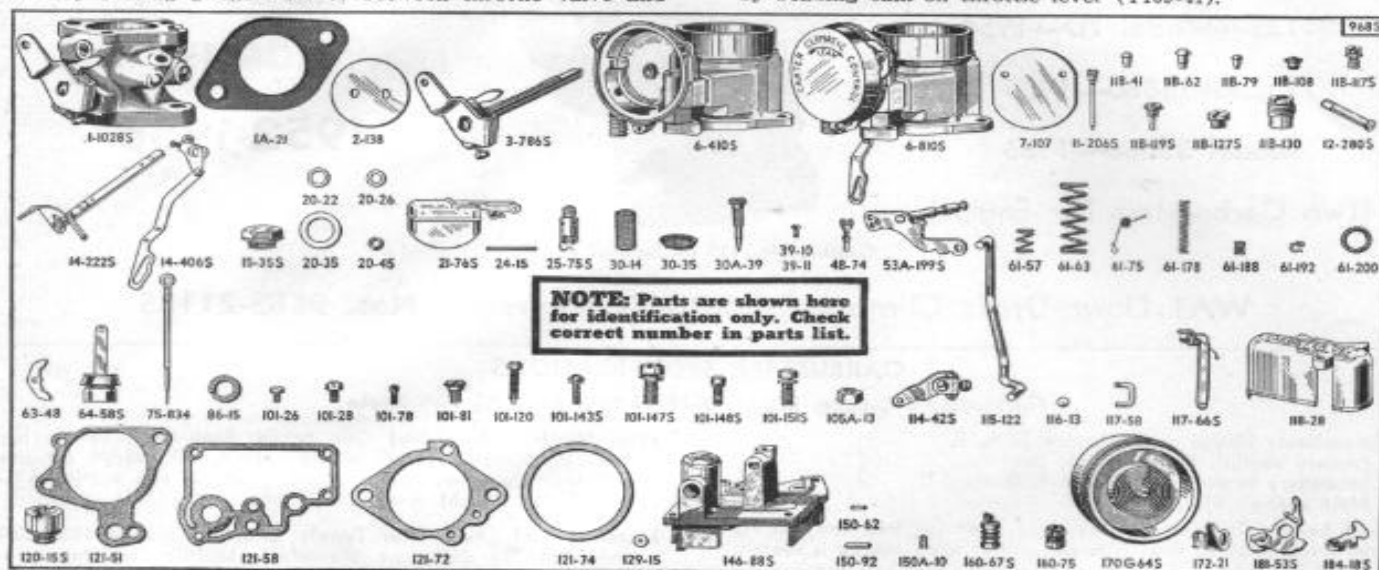
METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert gauge (tool T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .005" clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .016" by placing gauge T109-44 between throttle valve and

bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .010" between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw. There should now be 5/8" (T109-85) clearance between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be 9/16" clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (T109-41).



Hudson—1952-1956—Carburetors Nos. 968S-2113S

WHEN SERVICING, USE GASKET ASST. No. 198 (968S-2113S); RE-CARBURETION KIT No. 1723N (968S); No. 1776N (2113S)

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF RE-CARBURETION KIT

Part No.	PART NAME	Part No.	PART NAME
1-908S	Body flange assembly (968S) (Sup. by 1-1028S)	75-834	METERING ROD—STANDARD (968S)
1-1028S	Body flange assembly	75-861	Metering rod—1 size lean (968S)
1A-21	FLANGE GASKET	75-862	Metering rod—2 sizes lean (968S)
2-138	Throttle valve	75-863	Metering rod—3 sizes lean (968S)
3-786S	Throttle shaft and lever assembly	75-955	METERING ROD—STANDARD (2113S)
6-410S	Air horn assembly	75-974	Metering rod—1 size lean (2113S)
6-810S	Air horn and Climatic® control assembly	75-975	Metering rod—2 sizes lean (2113S)
7-107	Choke valve	75-976	Metering rod—3 sizes lean (2113S)
11-206S	Low speed jet assembly (968S)	86-15	Flange stud lock washer (2)
11-258S	Low speed jet assembly (2113S)	101-26	Coil housing attaching screw (3)
11B-41	Rivet plug	101-28	Throttle shaft arm clamp screw
11B-62	Rivet plug	101-78	Choke lever clamp screw
11B-79	Rivet plug (5)	101-81	Fast idle cam screw
11B-108	Idle port rivet plug	101-120	Throttle lever adjusting screw
11B-117S	Idle passage plug assembly	101-143S	Piston housing attaching screw and washer assembly
11B-119S	Ball retainer screw plug assembly	101-147S	Body flange attaching screw and washer assembly (2)
11B-127S	Passage plug assembly (2)	101-148S	Bowl cover attaching screw and washer assembly (5)
11B-130	NOZZLE RETAINER PLUG	101-151S	Air horn attaching screw and washer assembly (2)
12-280S	NOZZLE ASSEMBLY	105A-13	Flange stud nut (2)
14-222S	Choke piston lever, link and shaft assembly	114-42S	Throttle shaft arm and screw assembly
14-406S	Choke lever, screw and link assembly	115-122	Throttle connector rod
15-35S	Strainer nut assembly	116-13	Pump intake and discharge check ball (2)
20-22	Needle seat and plug gasket (3)	117-58	Pump connector link
20-26	Metering rod jet and plug gasket (3)	117-66S	Piston link and spring assembly
20-35	Bowl strainer gasket	118-28	Dust cover
20-45	NOZZLE GASKET	120-15S	METERING ROD JET ASSEMBLY
21-76S	Float and lever assembly	121-51	AIR HORN GASKET
24-15	Float lever pin	121-58	BOWL COVER GASKET
25-75S	NEEDLE AND SEAT ASSEMBLY	121-72	BODY FLANGE GASKET
30-14	Bowl strainer gauze	121-74	COIL HOUSING GASKET
30-35	Pump strainer	129-15	Metering rod disk
30A-39	Idle adjustment screw	146-88S	Bowl cover and strainer assembly
39-10	Choke valve attaching screw (2)	150-62	Choke piston pin
39-11	Throttle valve attaching screw (2)	150-92	Anti-percolator pin
48-74	Pump jet	150A-10	Pin spring (3)
53A-199S	Pump arm and countershaft assembly	160-67S	Vacuum piston and pin assembly
61-57	Idle adjustment screw spring	160-75	Choke piston
61-63	Pump spring	170G-64S	Thermostatic coil and housing assembly
61-75	Metering rod spring	172-21	Throttle connector rod retainer
61-178	VACUUM PISTON SPRING	181-53S	Fast idle cam and pin assembly
61-188	Rocker arm spring	184-18S	ANTI-PERCOLATOR CAP AND ROCKER ARM ASSEMBLY
63-48	Coil housing retainer (3)		
64-58S	PLUNGER AND ROD ASSEMBLY		
75-487	Metering rod (special for racing) (968S)		

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

(Two Carbureters Per Engine)



Casting No. 1002 on face of flange.

HUDSON

MODELS

1C-JET and

2C-SUPER JET

1953

WAI Down-Draft Climatic® Control Carburetor No. 2013S

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3 Inch Bore, 4 3/4 Inch Stroke

Dimensions: Flange size, 1 1/4 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

Main venturi, 1-5/16 inch I. D.

Float Level: See Adjustments.**Vents:** Outside, No. 10 (.1935 inch) drill. Inside, None.**Gasoline Intake:** Spring loaded needle. Size No. 42 (.0935 inch) drill in needle seat.**Low Speed Jet Tube:** Jet size No. 68 (.031 inch) drill. By-pass, size No. 53 (.0595 inch) drill. Economizer, size .0545-.0555 inch diameter. Idle bleed, size No. 53 (.0595 inch) drill.**Idle Port:** Upper Port, slot type, length .150 inch; width .030 inch.**Idle Port Opening:** .103 to .107 inch above top edge of valve with valve tightly closed.**Lower Port (For Idle Adjustment Screw):** No. 46 (.081 inch) drill.**Set Idle Adjustment Screw:** 3/4 to 1 3/4 turns open. For richer mixture, turn screw out. Idle engine between 490-510 r.p.m. (Hydra-matic—In Drive range); 540-560 r.p.m. (standard trans.) and 575 r.p.m. (Overdrive trans.).**Main Nozzle:** Slip nozzle, flush type. Discharge jet, size .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.**Metering Rod (Vacumeter Type):** Economy step, .073 inch diameter; middle step tapers to .067 inch; power step, .053 inch diameter.**Metering Rod Jet:** .096 inch diameter.**Metering Rod Setting:** See Adjustments.**Accelerating Pump:** Discharge jet, size No. 68 (.031 inch) drill. Intake ball check seat, size No. 40 (.098 inch) drill.

Discharge ball check seat, size No. 32 (.116 inch) drill.

Relief passage (to outside), size No. 42 (.0935 inch) drill.

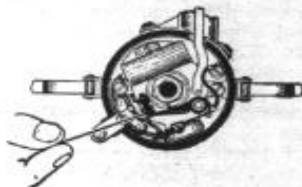
Pump Adjustment: See Adjustments.**Choke:** Carter Climatic® Control, set one point lean—Butterfly type offset valve. Choke heat suction hole, in body, size No. 40 (.098 inch) drill.**Vacuum Spark Port:** .051-.054 inch diameter. Top of port .010 to .020 inch above top edge of valve, with valve tightly closed.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



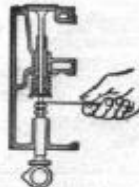
Spark Plug
Gap
.032"



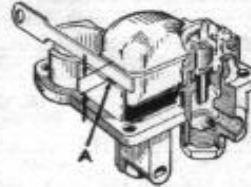
Breaker Point
Setting
.020"



Ignition Timing
Breaker Points to Open:
T. D. C.
At Vibration Damper



Valve Setting
(Hot)
Intake .010"
Exhaust .012"



Float Setting
1/4 Inch
(Use Gauge T109-31)



Idle Adjustment
Screw Setting
3/4 to 1 3/4
Turns Open

CARBURETOR ADJUSTMENTS

FLOAT ADJUSTMENT: With bowl cover inverted and float resting on pin in seated needle, the distance from the tip on the edge of the bowl cover to the soldered edge of the seam should be 1/4 inch (gauge T109-31). Do not depress float lip against spring loaded pin in needle, but let float rest of its own weight. To adjust, bend lip on float arm. Float setting must be checked with the bowl cover held at eye height in a level position.

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64 inch from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers

shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64 inch). Adjust by bending throttle connector rod at lower angle.

METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert gauge (tool T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .006 inch clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

CARBURETOR

TRADE MARK REG. U. S. PAT. OFF.
MARCA REGISTRADA

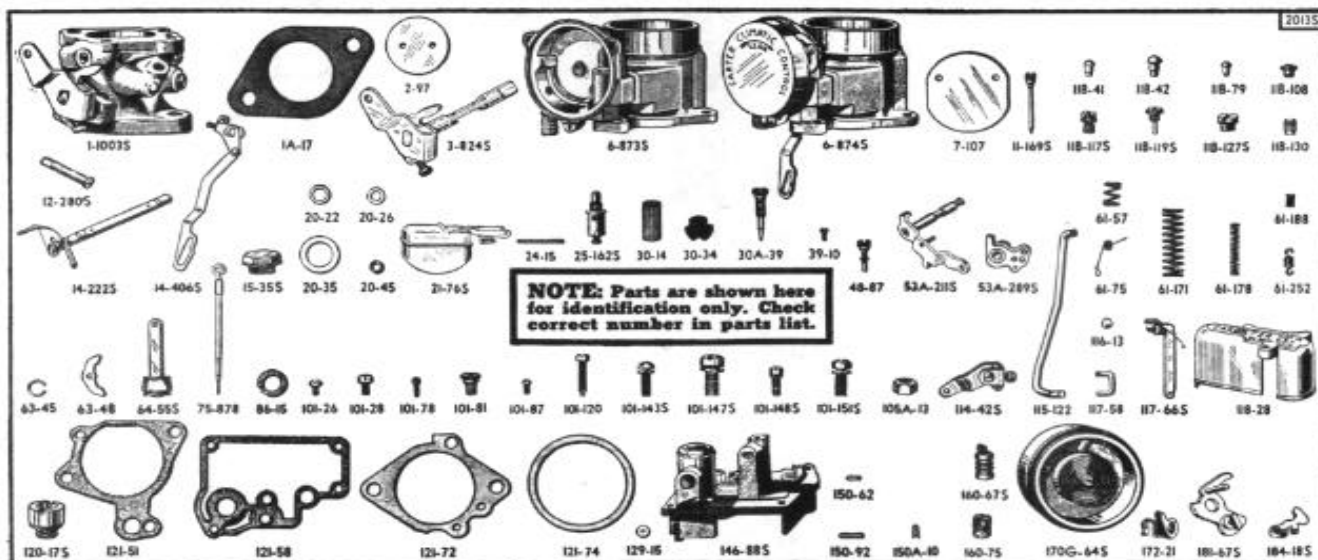
CARTER CARBURETOR CORPORATION, ST. LOUIS, MO., U. S. A.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .016 inch by placing gauge T109-44 between throttle valve and bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .010 inch between rocker arm lip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw.

There should now be $\frac{1}{8}$ inch clearance (gauge T109-83) between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be $\frac{9}{16}$ inch clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (use tool T109-41).



Hudson—1953—Carburetor No. 2013S

WHEN SERVICING, USE GASKET ASSORTMENT No. 139A; REPAIR PACKAGE No. 1737

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-10035	Body flange assembly.....	64-555	PLUNGER AND ROD ASSEMBLY (IDENTIFY BY SHAFT No. 49-113).....
1A-17	FLANGE GASKET.....	75-878	METERING ROD—STANDARD.....
2-97	Throttle valve.....	75-904	Metering rod—1 size lean.....
3-8245	Throttle shaft and lever assembly.....	75-905	Metering rod—2 sizes lean.....
6-8735	Air horn assembly.....	75-906	Metering rod—3 sizes lean.....
6-8745	Air horn and Climatic® control assembly.....	86-15	Flange stud lock washer..... (2)
7-107	Choke valve.....	101-26	Coil housing attaching screw..... (3)
11-1695	LOW SPEED JET ASSEMBLY.....	101-28	Throttle shaft arm clamp screw.....
11B-41	Rivet plug.....	101-78	Choke lever clamp screw.....
11B-42	Rivet plug.....	101-81	Fast idle cam screw.....
11B-79	Rivet plug..... (5)	101-87	THROTTLE VALVE ATTACHING SCREW..... (2)
11B-108	IDLE PORT RIVET PLUG.....	101-120	Throttle lever adjusting screw.....
11B-1175	Idle passage plug assembly.....	101-1435	Piston housing attaching screw and washer assembly.....
11B-1195	Ball retainer screw plug assembly.....	101-1475	Body flange attaching screw and washer assembly..... (2)
11B-1275	Passage plug assembly..... (2)	101-1485	Bowl and dust cover attaching screw and washer assembly..... (5)
11B-130	NOZZLE RETAINER PLUG.....	101-1515	Air horn attaching screw and washer assembly..... (2)
12-2805	NOZZLE ASSEMBLY.....	105A-13	Flange nut..... (2)
14-2225	Choke piston lever, link and shaft assembly.....	114-425	THROTTLE SHAFT ARM AND SCREW ASSEMBLY.....
14-4065	Choke lever, screw and link assembly.....	115-122	THROTTLE CONNECTOR ROD.....
15-355	Strainer nut assembly.....	116-13	PUMP CHECK BALL..... (2)
20-22	Needle seat and plug gasket..... (3)	117-58	PUMP CONNECTOR LINK.....
20-26	Metering rod jet and plug gasket..... (3)	117-665	Piston link and spring assembly.....
20-35	BOWL STRAINER GASKET.....	118-28	Dust cover.....
20-45	NOZZLE GASKET.....	120-175	METERING ROD JET ASSEMBLY.....
21-765	Float and lever assembly.....	121-51	AIR HORN GASKET.....
24-15	Float lever pin.....	121-58	BOWL COVER GASKET.....
25-1625	NEEDLE, PIN, SPRING AND SEAT ASSEMBLY.....	121-72	BODY FLANGE GASKET.....
30-14	BOWL STRAINER GAUZE.....	121-74	COIL HOUSING GASKET.....
30-34	PUMP STRAINER.....	129-15	Metering rod disk.....
30A-39	Idle adjustment screw.....	146-885	Bowl cover and strainer assembly.....
39-10	Choke valve attaching screw..... (2)	150-62	Choke piston pin.....
48-87	PUMP JET.....	150-92	Anti-percolator pin.....
53A-2115	Pump operating lever and countershaft assembly.....	150A-10	Pin spring..... (3)
53A-2895	Pump arm and collar assembly.....	160-675	Vacuum piston and pin assembly.....
61-57	Idle adjustment screw spring.....	160-75	Choke piston.....
61-75	Metering rod spring.....	170G-645	Thermostatic coil and housing assembly.....
61-171	Pump spring.....	172-21	THROTTLE CONNECTOR ROD RETAINER.....
61-178	VACUUM PISTON SPRING.....	181-675	Fast idle cam and pin assembly.....
61-188	Rocker arm spring.....	184-185	ANTI-PERCOLATOR CAP AND ROCKER ARM ASSEMBLY.....
61-252	Pump operating lever spring.....		
63-45	Intake check ball retainer ring.....		
63-48	Coil housing retainer..... (3)		

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used

(Two Carburetors Per Engine)



Casting No. 1002 on face of flange.

HUDSON MODELS 1C-1D-JET and 2C-2D-SUPER JET 3D-JET LINER 1953-1954

WAI Down-Draft Climatic® Control Carburetor No. 20135

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3 Inch Bore, 4¾ Inch Stroke

Dimensions: Flange size, 1¼ inch S. A. E.

Primary venturi, 11/32 inch I. D.

Secondary venturi, 11/16 inch I. D.

Main venturi, 1-5/16 inch I. D.

Float Level: See Adjustments.**Vents:** Outside, No. 10 (.1935 inch) drill. Inside, None.**Gasoline Intake:** Spring loaded needle. Size No. 42 (.0935 inch) drill in needle seat.**Low Speed Jet Tube:** Jet size No. 68 (.031 inch) drill. By-pass, size No. 53 (.0595 inch) drill. Economizer, size .0545-.0555 inch diameter. Idle bleed, size No. 53 (.0595 inch) drill.**Idle Port:** Upper Port, slot type, length .150 inch; width .030 inch.**Idle Port Opening:** .103 to .107 inch above top edge of valve with valve tightly closed.**Lower Port (For Idle Adjustment Screw):** No. 46 (.081 inch) drill.**Set Idle Adjustment Screw:** ¾ to 1¾ turns open. For richer mixture, turn screw out. Idle engine at 500 r.p.m. (Hydramatic—In Drive range); 550 r.p.m. (Standard trans.) and 575 r.p.m. (1953), 550 r.p.m. (1954) (Overdrive trans.).**Main Nozzle:** Slip nozzle, flush type. Discharge jet, size .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.**Metering Rod (Vacuum Type):** Economy step, .073 inch diameter; middle step tapers to .067 inch; power step, .053 inch diameter.**Metering Rod Jet:** .096 inch diameter.**Metering Rod Setting:** See Adjustments.**Accelerating Pump:** Discharge jet, size No. 68 (.031 inch) drill. Intake ball check seat, size No. 40 (.098 inch) drill.

Discharge ball check seat, size No. 32 (.116 inch) drill.

Relief passage (to outside), size No. 42 (.0935 inch) drill.

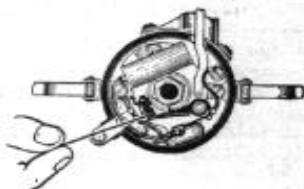
Pump Adjustment: See Adjustments.**Choke:** Carter Climatic® Control, set one point lean—Butterfly type offset valve. Choke heat suction hole, in body, size No. 40 (.098 inch) drill.**Vacuum Spark Port:** .051-.054 inch diameter. Top of port .010 to .020 inch above top edge of valve, with valve tightly closed.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



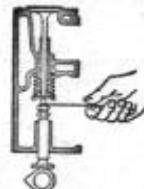
Spark Plug
Gap
.032"



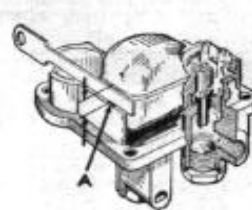
Breaker Point
Setting
.020"



Ignition Timing
Breaker Points to Open:
T. D. C.
At Vibration Damper



Valve Setting
(Hot)
Intake .010"
Exhaust .012"



Float Setting
¼ Inch
(Use Gauge T109-31)



Idle Adjustment
Screw Setting
¾ to 1¾
Turns Open

CARBURETOR ADJUSTMENTS

FLOAT ADJUSTMENT: With bowl cover inverted and float resting on pin in seated needle, the distance from the tip on the edge of the bowl cover to the soldered edge of the seam should be ¼ inch (gauge T109-31). Do not depress float lip against spring loaded pin in needle, but let float rest of its own weight. To adjust, bend lip on float arm. Float setting must be checked with the bowl cover held at eye height in a level position.

PUMP ADJUSTMENT: With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64 inch from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-117S. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers

shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64 inch). Adjust by bending throttle connector rod at lower angle.

METERING ROD ADJUSTMENT: Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert gauge (tool T109-102) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .005 inch clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

CARBURETOR

TRADE MARK REG. U. S. PAT. OFF.
MARCA REGISTRADA

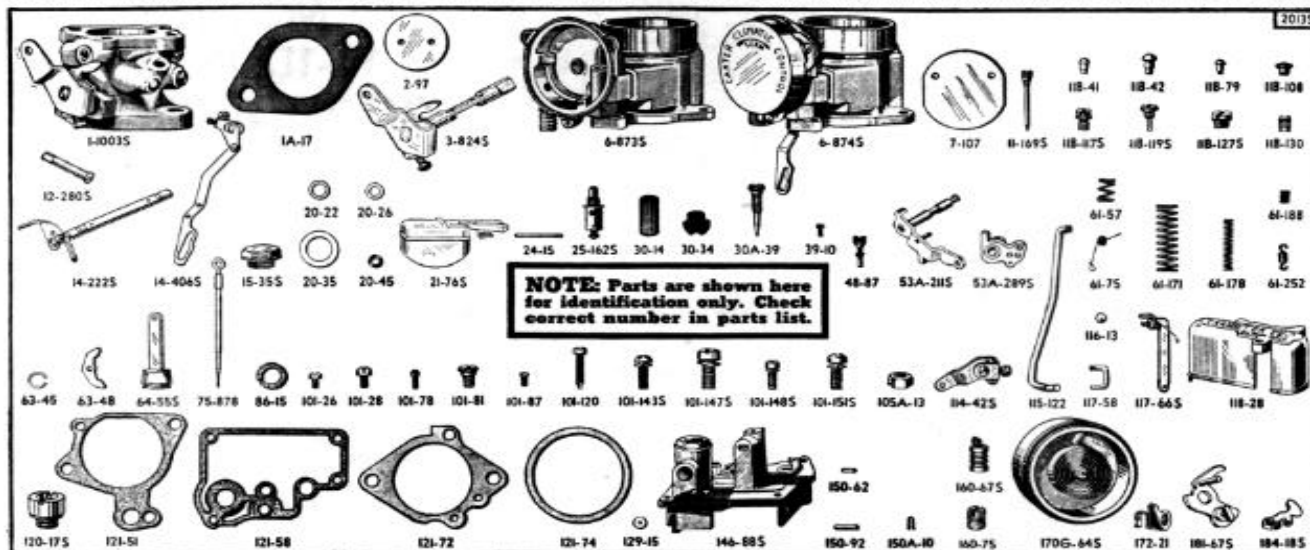
CARTER CARBURETOR CORPORATION, ST. LOUIS, MO., U. S. A.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .016 inch by placing gauge T109-44 between throttle valve and bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .010 inch between rocker arm tip and pump arm.

FAST IDLE ADJUSTMENT: With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw.

There should now be $\frac{1}{8}$ inch clearance (gauge T109-83) between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be $\frac{9}{16}$ inch clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (use tool T109-41).



Hudson—1953-54—Carburetor No. 2013S

WHEN SERVICING, USE GASKET ASSORTMENT No. 139A; REPAIR PACKAGE No. 1737

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-10035	Body flange assembly.....	64-555	PLUNGER AND ROD ASSEMBLY (IDENTIFY BY SHAFT No. 49-113).....
1A-17	FLANGE GASKET.....	75-878	METERING ROD—STANDARD.....
2-97	Throttle valve.....	75-904	Metering rod—1 size lean.....
3-8245	Throttle shaft and lever assembly.....	75-905	Metering rod—2 sizes lean.....
6-8735	Air horn assembly.....	75-906	Metering rod—3 sizes lean.....
6-8745	Air horn and Climatic® control assembly.....	86-15	Flange stud lock washer.....(2)
7-107	Choke valve.....	101-26	Coil housing attaching screw.....(3)
11-1695	LOW SPEED JET ASSEMBLY.....	101-28	Throttle shaft arm clamp screw.....
11B-41	Rivet plug.....	101-78	Choke lever clamp screw.....
11B-42	Rivet plug.....	101-81	Fast idle cam screw.....(5)
11B-79	Rivet plug.....	101-87	THROTTLE VALVE ATTACHING SCREW.....(2)
11B-108	IDLE PORT RIVET PLUG.....	101-120	Throttle lever adjusting screw.....
11B-1175	Idle passage plug assembly.....	101-1435	Piston housing attaching screw and washer assembly.....
11B-1195	Ball retainer screw plug assembly.....	101-1475	Body flange attaching screw and washer assembly.....(2)
11B-1275	Passage plug assembly.....	101-1485	Bowl and dust cover attaching screw and washer assembly.....(5)
11B-130	NOZZLE RETAINER PLUG.....(2)	101-1515	Air horn attaching screw and washer assembly.....(2)
12-2805	NOZZLE ASSEMBLY.....	105A-13	Flange nut.....
14-2225	Choke piston lever, link and shaft assembly.....	114-425	THROTTLE SHAFT ARM AND SCREW ASSEMBLY.....(2)
14-4065	Choke lever, screw and link assembly.....	115-122	THROTTLE CONNECTOR ROD.....
15-355	Strainer nut assembly.....	116-13	PUMP CHECK BALL.....(2)
20-22	Needle seat and plug gasket.....(3)	117-58	PUMP CONNECTOR LINK.....
20-26	Metering rod jet and plug gasket.....(3)	117-665	Piston link and spring assembly.....
20-35	BOWL STRAINER GASKET.....	118-28	Dust cover.....
20-45	NOZZLE GASKET.....	120-175	METERING ROD JET ASSEMBLY.....
21-765	Float and lever assembly.....	121-51	AIR HORN GASKET.....
24-15	Float lever pin.....	121-58	BOWL COVER GASKET.....
25-1625	NEEDLE, PIN, SPRING AND SEAT ASSEMBLY.....	121-72	BODY FLANGE GASKET.....
30-14	BOWL STRAINER GAUZE.....	121-74	COIL HOUSING GASKET.....
30-34	PUMP STRAINER.....	129-15	Metering rod disk.....
30A-39	Idle adjustment screw.....	146-885	Bowl cover and strainer assembly.....
39-10	Choke valve attaching screw.....(2)	150-62	Choke piston pin.....
48-87	PUMP JET.....	150-92	Anti-percolator pin.....
53A-2115	Pump operating lever and countershaft assembly.....	150A-10	Pin spring.....(3)
53A-2895	Pump arm and collar assembly.....	160-675	Vacuum piston and pin assembly.....
61-57	Idle adjustment screw spring.....	160-75	Choke piston.....
61-75	Metering rod spring.....	170G-645	Thermostatic coil and housing assembly.....
61-171	Pump spring.....	172-21	THROTTLE CONNECTOR ROD RETAINER.....
61-178	VACUUM PISTON SPRING.....	181-675	Fast idle cam and pin assembly.....
61-188	Rocker arm spring.....	184-185	ANTI-PERCOLATOR CAP AND ROCKER ARM ASSEMBLY.....
61-252	Pump operating lever spring.....		
63-45	Intake check ball retainer ring.....		
63-48	Coil housing retainer.....(3)		

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.



Casting No. 972 on face of flange.

HUDSON

MODELS

1C-JET and 2C-SUPER JET

1953

1D-JET, 2D-SUPER JET and 3D-JET LINER

1954

WAI Down-Draft Climatic® Control Carburetors Nos. 2009S-2009SA

CARBURETOR SPECIFICATIONS

For Hudson 6 Cylinder Engine: 3 Inch Bore, 4 3/4 Inch Stroke

Dimensions: Flange size, 1 1/4 inch S. A. E.

Primary venturi, 1 1/32 inch I. D.

Secondary venturi, 1 1/16 inch I. D.

Main venturi, 1 3/8 inch I. D.

Float Level: See Adjustments.**Vents:** Outside, No. 10 (.1935 inch) drill. Inside, None.**Gasoline Intake:** Size No. 46 (.081 inch) drill in needle seat.**Low Speed Jet Tube:** Jet size No. 65 (.035 inch) drill. By-pass,

size No. 53 (.0595 inch) drill. Economizer, size .0545-.0555 inch diameter. Idle bleed, size No. 53 (.0595 inch) drill.

Idle Port: Upper Port, slot type, length .165 inch; width, .030 inch.**Idle Port Opening:** .120 to .124 inch above top edge of valve with valve tightly closed.**Lower Port (For Idle Adjustment Screw):** No. 46 (.081 inch) drill.**Set Idle Adjustment Screw:** 1/2 to 1 1/2 turns open. For richer mixture, turn screw out. Idle engine at 500 r.p.m. (Hydra-Matic—In Drive range); 550 r.p.m. (standard trans.) and 575 r.p.m. (1953), 550 r.p.m. (1954) (Overdrive trans.).**Main Nozzle:** Slip nozzle, flush type. Discharge jet, size .110 inch diameter. Inner nozzle (seats in slip nozzle) I. D. No. 31 (.120 inch) drill.**Metering Rod (Vacumeter Type):** Economy step, .074 inch diameter; middle step tapers to .063 inch diameter; power step, .040 inch diameter.**Metering Rod Jet:** .1015 inch diameter.**Metering Rod Setting:** See Adjustments.**Accelerating Pump:** Discharge jet, size No. 68 (.031 inch) drill. Intake ball check seat, size No. 40 (.098 inch) drill.

Discharge ball check seat, size No. 32 (.116 inch) drill.

Relief passage (to outside), size No. 42 (.0935 inch) drill.

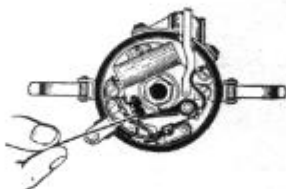
Pump Adjustment: See Adjustments.**Choke:** Carter Climatic® Control, set on Index—Butterfly type offset valve. Choke heat suction hole, in body, size No. 40 (.098 inch) drill.**Vacuum Spark Port:** .051-.054 inch diameter. Bottom of port .005 to .015 inch above top edge of valve, with valve tightly closed.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

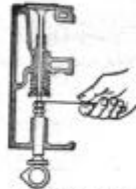
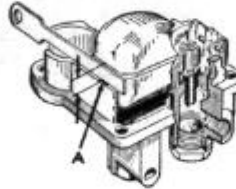
CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



Spark Plug

Gap
.032"

Breaker Point

Setting
.020"Ignition Timing
Breaker Points to Open:
T. D. C.
At Vibration DamperValve Setting
(Hot)
Intake .010"
Exhaust .012"Float Setting
See AdjustmentsIdle Adjustment
Screw Setting
1/2 to 1 1/2
Turns Open

CARBURETOR ADJUSTMENTS

FLOAT ADJUSTMENT: With bowl cover inverted and float resting on seated needle, the distance from the tip on the edge of the bowl cover to the soldered edge of the seam should be 1/2 inch (gauge T109-83 for 2009S) and 7/16 inch (gauge T109-81 for 2009SA). To adjust, bend lip on float arm.**PUMP ADJUSTMENT:** With throttle valve seated, and connector link in lower hole (medium stroke), pump plunger should travel 16/64 inch from closed to wide open throttle position. Measure pump travel by using Universal pump travel gauge T109-1175. Place base of the gauge on ridged portion of bowl cover so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the numbers shown by index mark on gauge, at wide open and closed throttle position should be "16" (16/64 inch). Adjust by bending throttle connector rod at lower angle.**METERING ROD ADJUSTMENT:** Correct setting of metering rod is important and must be made after pump adjustment or when leaner than standard rods are installed. Insert

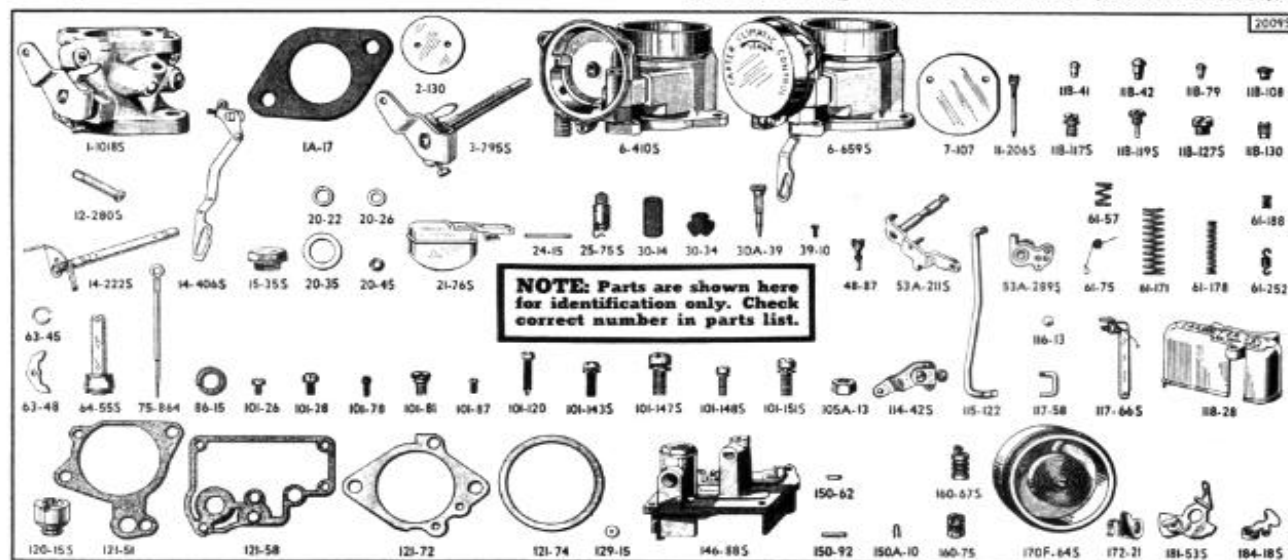
gauge (T109-102 for 2009S) or (T109-241 for 2009SA) in place of metering rod, seating tapered end of gauge in metering rod jet. Hold gauge vertical to insure seating in jet. With throttle valve seated, press down on piston link directly over piston until it contacts the pump arm. There should now be less than .005 inch clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjust by bending lip on piston link (use tool T109-105). Remove gauge and install metering rod, disc, pin and spring.

ANTI-PERCOLATOR ADJUSTMENT: Crack throttle valve .030 inch by placing gauge T109-29 between throttle valve and bore of carburetor (side opposite idle port). Bend rocker arm (use tool T109-105) until there is a clearance of .010 inch between rocker arm lip and pump arm.**FAST IDLE ADJUSTMENT:** With fast idle cam in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step is against (not on) set screw.

CARTER CARBURETOR CORPORATION, ST. LOUIS, MO., U. S. A.

There should now be $\frac{1}{16}$ inch clearance (gauge T109-85) between inside wall of air horn and lower edge of choke valve. Adjust by bending fast idle link at offset portion (use tool T109-41).

UNLOADER ADJUSTMENT: With throttle valve wide open there should be $\frac{9}{16}$ inch clearance (gauge T109-84) between lower edge of choke valve and inner wall of air horn. Adjust by bending cam on throttle lever (use tool T109-41).



Hudson—1953-54—Carburetors Nos. 2009S-2009SA

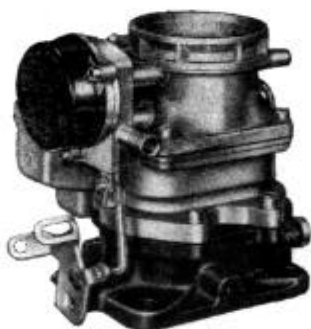
WHEN SERVICING, USE GASKET ASSORTMENT No. 139A; REPAIR PACKAGE No. 1736

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-1018S	Body flange assembly.....	75-909	Metering rod—3 sizes lean (2009S).....
1A-17	FLANGE GASKET.....	75-914	Metering rod—standard (2009SA).....
2-130	Throttle valve.....	75-915U	*UNITIZED PACKAGE (CONSISTS OF 1—61-199, 1—75-914, 1—120-191S AND 1—107-45).....
3-795S	Throttle shaft and lever assembly.....	75-920	Metering rod—1 size lean (2009SA).....
6-410S	Air horn assembly.....	75-921	Metering rod—2 sizes lean (2009SA).....
6-659S	Air horn and Climatic® control assembly.....	75-922	Metering rod—3 sizes lean (2009SA).....
7-107	Choke valve.....	86-15	Flange stud lock washer..... (2)
11-206S	LOW SPEED JET ASSEMBLY.....	101-26	Coil housing attaching screw..... (3)
11B-41	Rivet plug.....	101-28	Throttle shaft arm clamp screw.....
11B-42	Rivet plug.....	101-78	Choke lever clamp screw.....
11B-79	Rivet plug..... (5)	101-81	Fast idle cam screw.....
11B-108	IDLE PORT RIVET PLUG.....	101-87	THROTTLE VALVE ATTACHING SCREW..... (2)
11B-117S	Idle plug assembly.....	101-120	Throttle lever adjusting screw.....
11B-119S	Ball retainer screw plug assembly.....	101-143S	Piston housing attaching screw and washer assembly.....
11B-127S	Pump jet and nozzle plug assembly..... (2)	101-147S	Body flange attaching screw and washer assembly..... (2)
11B-130	NOZZLE RETAINER PLUG.....	101-148S	Bowl cover attaching screw and washer assembly..... (5)
12-280S	NOZZLE ASSEMBLY.....	101-151S	Air horn attaching screw and washer assembly..... (2)
14-222S	Choke piston lever, link and shaft assembly.....	105A-13	Flange stud nut..... (2)
14-406S	Choke lever, screw and link assembly.....	114-42S	THROTTLE SHAFT ARM AND SCREW ASSEMBLY.....
15-35S	Strainer nut assembly.....	115-122	THROTTLE CONNECTOR ROD.....
20-22	Needle seat and plug gasket..... (3)	116-13	CHECK BALL..... (2)
20-26	Metering rod jet and plug gasket..... (3)	117-58	PUMP CONNECTOR LINK.....
20-35	BOWL STRAINER GASKET.....	117-66S	Piston link and spring assembly.....
20-45	NOZZLE GASKET.....	118-28	Dust cover.....
21-76S	Float and lever assembly.....	120-15S	Metering rod jet assembly (2009S) (Sup. by 75-915U).....
24-15	Float lever pin.....	120-191S	Metering rod jet assembly (2009SA).....
25-75S	NEEDLE AND SEAT ASSEMBLY.....	121-51	AIR HORN GASKET.....
30-14	BOWL STRAINER GAUZE.....	121-58	BOWL COVER GASKET.....
30-34	PUMP STRAINER.....	121-72	BODY FLANGE GASKET.....
30A-39	Idle adjustment screw.....	121-74	COIL HOUSING GASKET.....
39-10	Choke valve attaching screw..... (2)	129-15	Metering rod disk.....
48-87	PUMP JET.....	146-88S	Bowl cover and strainer assembly.....
53A-211S	Pump operating lever and countershaft assembly.....	150-62	Choke piston pin.....
53A-289S	Pump arm and collar assembly.....	150-92	Anti-percolator pin.....
61-57	Idle adjustment screw spring.....	150A-10	Pin spring..... (3)
61-75	Metering rod spring.....	160-67S	Vacuum piston and pin assembly.....
61-171	Pump spring.....	160-75	Choke piston.....
61-178	Vacuum piston spring (2009S) (Sup. by 75-915U).....	170F-64S	Thermostatic coil and housing assembly.....
61-188	Rocker arm spring.....	172-21	THROTTLE CONNECTOR ROD RETAINER.....
61-199	Vacuum piston spring (2009SA).....	181-53S	Fast idle cam and pin assembly.....
61-252	Pump operating lever spring.....	184-18S	ANTI-PERCOLATOR CAP AND ROCKER ARM ASSEMBLY.....
63-45	Ball retainer ring.....		
63-48	Coil housing retainer..... (3)		
64-55S	PLUNGER AND ROD ASSEMBLY.....		
75-864	Metering rod—standard (2009S) (Sup. by 75-915U).....		
75-907	Metering rod—1 size lean (2009S).....		
75-908	Metering rod—2 sizes lean (2009S).....		

*75-915U used to convert 2009S carburetor to 2009SA.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.



Casting No. 771 on face of flange.

HUDSON

"HORNET"—Model 7D

"SUPER WASP"—Model 5D

1954

WGD Dual Down-Draft Climatic® Control Carburetor No. 21155

CARBURETOR SPECIFICATIONS

For Hudson (7D) 6 Cylinder Engine: 3-13/16 Inch Bore, 4 1/2 Inch Stroke

For Hudson (5D) 6 Cylinder Engine: 3-9/16 Bore, 4 3/8 Inch Stroke

Dimensions: Flange size, 1 1/4 inch dual, 4 bolt type. Primary venturi, 1 1/32 inch I.D. Secondary venturi, 2 1/32 inch I.D. Main venturi, 1-3/16 inch I.D.

Float Level: See adjustments.

Vents: Inside None. Outside, size No. 10 (.1935 inch) drill.

Gasoline Intake: Size No. 42 (.0935 inch) drill in needle seat.

Low Speed Jet Tube: Jet, size No. 68 (.031 inch) drill. By-pass, in air horn, size No. 55 (.052 inch) drill. Economizer, in air horn, size .045 inch diameter. Idle bleed, in air horn, size No. 56 (.0465 inch) drill.

Idle Port: Upper, slot type, length .200 inch; width .030 inch.

Idle Port Opening: .157 to .163 inch above upper edge of valve with valve tightly closed.

Lower Port (For Idle Adjustment Screw): Size .0615 to .0655 inch diameter.

Set Idle Adjustment Screw: 3/4 to 1 3/4 turns open. For richer mixture turn screw out. Do not idle engine below 500 r.p.m. (Hydra-Matic In Drive Range): 550 r.p.m. (standard and over drive Trans.)

Main Nozzle: Nozzle is installed permanently. DO NOT REMOVE. Anti percolating well; jet size No. 66 (.033 inch) drill.

Metering Rod (Vacuum Type): Economy step .068 inch diameter. Middle step tapers to .063 inch diameter. Power step .048 inch diameter.

Metering Rod Jet: Size .089 inch diameter.

Metering Rod Setting: See adjustments.

Accelerating Pump: Intake check ball seat, size .100 inch diameter. Discharge needle seat, size No. 50 (.070 inch) drill. Discharge jet (twin) size No. 74 (.0225 inch) drill.

Pump Adjustment: See adjustments.

Choke: Carter Climatic® Control, set 2 points lean. Butterfly type, offset valve. Choke heat suction hole in piston housing size No. 36 (.1065 inch) drill.

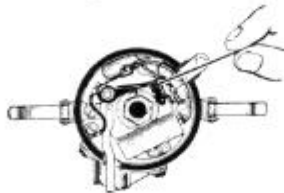
Vacuum Spark Port: Round type .039 to .041 inch diameter. Top of port to be .020 to .030 inch above top edge of valve with valve tightly closed.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carburetor.



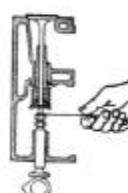
Spark Plug
Gap
.032"



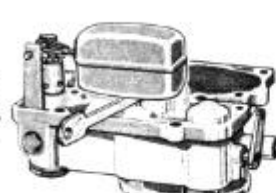
Breaker Point
Setting
.020"



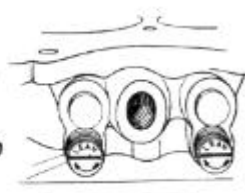
Ignition Timing
Breaker Points
to Open:
T.D.C.



Valve Setting
(Hot)
Intake .008"
Exhaust .010"



Float Setting
(See Adjustments)



Idle Adjustment
Screw Setting
3/4 to 1 3/4
Turns Open

CARBURETOR ADJUSTMENTS

Float Adjustment: With bowl cover gasket removed, bowl cover inverted and needle seated, there should be 3/16 inch (gauge T109-28) between top of float and bowl cover. Adjust by bending float arm.

Pump Adjustment: Back out throttle lever set screw until throttle valves seat in bores of carburetor. Place Universal pump travel gauge T109-1175 inverted on edge of dust cover boss of bowl cover. Turn knurled nut of gauge until finger on gauge just touches top of

CARTER CARBURETOR CORPORATION, ST. LOUIS, MO., U. S. A.

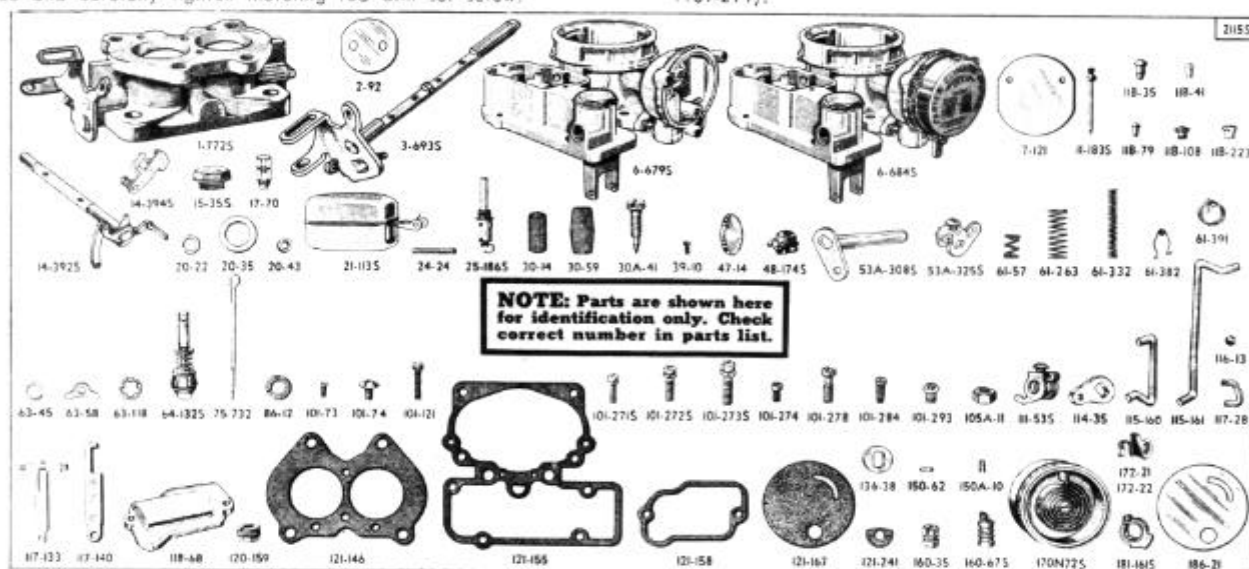
plunger shaft. Number indicated on gauge should be ".43". Adjust by bending throttle connector rod at upper angle.

Optional Adjustment: The distance from the dust cover boss to the top of the plunger shaft should be 1/2 inch. Adjust as mentioned above.

Metering Rod Adjustment: The metering rods must be adjusted after the pump adjustment or when leaner than standard rods are installed. No metering rod gauges are necessary; procedure is as follows: With the throttle lever set screw backed out and throttle valves seated in bores of carburetor, press down on vacuum meter link until metering rods bottom in casting. With rods held in this position, revolve metering rod arm until lip contacts vacuum meter link. Hold in place and carefully tighten metering rod arm set screw.

Fast Idle Adjustment: With the thermostatic coil housing gasket and baffle plate removed, crack throttle valve and hold choke valve closed. Then close throttle. There should now be .026" clearance (gauge T109-189) between throttle valve and bore of carburetor (side opposite idle port). Adjust by bending the choke connector rod at lower angle.

Unloader Adjustment: Must be made after fast idle adjustment. Hold throttle valve wide open and close choke valve as far as possible without forcing; there should now be 5/32 inch (gauge T109-154) clearance between upper edge of choke valve and inner wall of air horn. Adjust by bending arm on choke trip lever (tool T109-214).



Hudson—1954—Carburetor No. 2115S
WHEN SERVICING, USE GASKET ASSORTMENT No. 196

Part No.	PART NAME
1-7725	Body flange assembly.....
2-92	Throttle valve..... (2)
3-6935	Throttle shaft and lever assembly.....
6-6795	Air horn assembly.....
6-6845	Air horn and Climatic ® control assembly.....
7-121	Choke valve.....
11-1835	Low speed jet assembly..... (2)
11B-35	Rivet plug..... (3)
11B-41	Rivet plug..... (3)
11B-79	Rivet plug.....
11B-108	Idle port rivet plug..... (2)
11B-223	Nozzle passage rivet plug..... (2)
14-3925	Choke piston lever, link and shaft assembly.....
14-3945	Choke trip lever and pin assembly.....
15-355	Strainer nut assembly.....
17-70	Pump check needle.....
20-22	Needle seat gasket.....
20-35	Bowl strainer gasket.....
20-43	Piston housing gasket.....
21-1135	Float and lever assembly.....
24-24	Float lever pin.....
25-1865	Needle and seat assembly.....
30-14	Bowl cover strainer.....
30-59	Strainer.....
30A-41	Idle adjustment screw..... (2)
39-10	Choke valve attaching screw..... (2)
47-14	Welsh plug.....
48-1745	Pump jet and housing assembly.....
53A-3085	Pump operating lever and countershaft assembly.....
53A-3255	Pump arm and screw assembly.....
61-57	Idle adjustment screw spring..... (2)
61-263	Pump spring (lower).....
61-332	Vacuum piston spring.....
61-382	Metering rod spring.....
61-391	Fast idle cam spring.....
63-45	Pump check ball retainer ring.....
63-58	Coil housing retainer..... (3)
63-118	Throttle shaft retaining ring.....
64-1325	Pump plunger, rod, spring and retainer assembly.....
75-732	Metering rod—standard..... (2)

Part No.	PART NAME
75-741	Metering rod—2 sizes lean..... (2)
75-980	Metering rod—1 size lean..... (2)
75-981	Metering rod—3 sizes lean..... (2)
86-12	Flange stud lock washer..... (4)
101-73	Throttle valve attaching screw..... (4)
101-74	Throttle shaft arm attaching screw.....
101-121	Throttle lever adjustment screw.....
101-2715	Dust cover attaching screw and washer assy..... (2)
101-2725	Air horn attaching screw and washer assembly..... (8)
101-2735	Body flange attaching screw and washer assy..... (4)
101-274	Coil housing attaching screw..... (3)
101-278	Pump jet housing attaching screw.....
101-284	Piston housing attaching screw..... (3)
101-293	Metering rod arm clamp screw..... (2)
105A-11	Flange stud nut..... (4)
111-535	Metering rod arm and screw assembly.....
114-35	Throttle shaft arm.....
115-160	Choke connector rod.....
115-161	Throttle connector rod.....
116-13	Pump intake check ball.....
117-28	Pump connector link.....
117-133	Vacuum meter piston link.....
117-140	Fast idle link.....
118-68	Dust cover.....
120-159	Metering rod jet..... (2)
121-146	Body flange gasket.....
121-155	Air horn gasket.....
121-158	Dust cover gasket.....
121-167	Coil housing gasket.....
121-241	Pump jet gasket.....
136-38	Throttle shaft washer.....
150-62	Choke piston pin.....
150A-10	Pin spring.....
160-35	Choke piston.....
160-675	Vacuum piston and pin assembly.....
170N725	Thermostatic coil and housing assembly.....
172-21	Throttle connector rod retainer.....
172-22	Throttle and choke connector rod retainer..... (2)
181-1615	Fast idle cam assembly.....
186-21	Choke baffle plate.....

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.

