

1970 "V8"
BARRACUDA-B - CHALLENGER-J
DODGE-W - PLYMOUTH-R

AFB FOUR-BORE DOWN-DRAFT CLIMATIC CONTROL CARBURETOR Nos. 4742S - 4745S - 4746S

MODEL		ENGINE DISPL.	ORIGINAL CARB. NO.	SERVICE CARB. NO.	ZIP-KIT NO.
B, J, R, W (FRONT)	ALL/T	426 (HEMI)	4742S	4742S	902-240B
B, J, R, W (REAR) (C.A.S.) (E.C.S.)	S/T	426 (HEMI)	4745S	4745S	902-240B
B, J, R, W (REAR) (C.A.S.) (E.C.S.)	A/T	426 (HEMI)	4746S	4746S	902-240B

CARBURETOR SPECIFICATIONS

AND

ADJUSTMENT DATA

SEE BACK PAGE FOR PROCEDURE

CARB. NO.	THROTTLE BORE	C.F.M.	VACUUM SPARK PORT	CHOKE SETTING	FLOAT LEVEL	FLOAT DROP	PUMP	FAST IDLE LINKAGE	FAST IDLE R.P.M.	UN- LOADER	BOWL VAPOR VENT	SEC. THRO. LEVER
4742S	1-7/16 (P) 1-11/16 (S)	455	NONE	—	19/64	23/32	7/16	—	—	—	—	17/64
4745S	1-7/16 (P) 1-11/16 (S)	455	NONE	2 RICH	7/32	23/32	7/16	1/16	2000	1/4	3/4	17/64
4746S	1-7/16 (P) 1-11/16 (S)	455	NONE	2 RICH	7/32	23/32	7/16	1/16	2000	1/4	3/4	17/64

MOTOR TUNE-UP — BE ACCURATE!

Spark Plug Gap .035"	Breaker Point Setting .017"	Ignition Timing See Decal In Engine Compartment	Idle Mixture Screw Setting 4742 None All Others Limiter Cap Type	Idle R.P.M. See Decal In Engine Compartment
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Carter
Carburetor
Division



CARBURETOR ADJUSTMENTS

SEE FRONT PAGE FOR SPECIFIC SETTINGS

FLOAT ALIGNMENT: Side of floats parallel to edge of casting. Minimum clearance between lever and air horn lugs without binding. To adjust, bend float lever.

FLOAT LEVEL: Specified clearance, between top of floats (at outer end) and air horn gasket. To adjust, bend float lever.

FLOAT DROP: Specified clearance between top of floats (at outer end) and air horn gasket. To adjust, bend stop tabs on float brackets.

PUMP: Specified distance from the top of the bowl cover to the top of the plunger shaft with throttle connector rod in center hole (medium stroke) of pump arm with throttle valves tightly closed. To adjust, bend throttle connector rod.

FAST IDLE LINKAGE: With fast idle screw on second step and against shoulder of first step of cam, adjust choke connector rod to give specified clearance between top edge of choke valve and inner wall of air horn. (Open and close throttle so fast idle cam is free to operate.)

FAST IDLE ON CAR: With fast idle screw on second step and against shoulder of first step of cam. Adjust screw to specified R.P.M.

UNLOADER: Specified clearance between upper edge of choke valve and inner wall of air horn, with throttle wide open. To adjust, bend tang on throttle lever.

BOWL VAPOR VENT (E.C.S.): With throttle valves set at curb idle, remove plug from air horn and insert a narrow ruler in hole. Rest ruler lightly on top of valve. The dimension from top of valve to top of casting should be as specified. To adjust bend operating lever on throttle shaft. Install rivet plug.

SECONDARY THROTTLE LEVER: 1. Block choke valve wide open. 2. With specified clearance between lower edge of primary valve and bore (opposite idle port) secondary valves should just start to open. To adjust, bend throttle operating rod. **NOTE:** at wide open throttle, primary and secondary valves will reach full vertical position. 3. With primary and secondary throttle valves in tightly closed position there should be .010" to .030" between positive closing shoes on primary and secondary throttle levers. To adjust, bend shoe on secondary lever. **NOTE:** If necessary, bend stop lug on secondary lever to prevent secondary valves from going past wide open.

SECONDARY THROTTLE LOCK-OUT: Crack throttle valves and manually open and close the choke valve. Tang on secondary throttle lever should freely engage in notch of lock out dog. To adjust, bend tang on secondary throttle lever.

IDLE SOLENOID: Set solenoid screw to R.P.M. shown on decal in engine compartment. Adjust mixture screw to obtain smoothest idle. Turn in idle speed screw until it just touches lever, then back out one turn.

PARTS LIST

Part No.	PART NAME
1A-248	Flange gasket
2-281	Secondary throttle valve (2)
2-289	Primary throttle valve (2)
3-1257	Secondary throttle shaft (4742)
3-1258S	Secondary throttle shaft and dog assy. (4745, 46)
3-1277S	Auxiliary throttle shaft, valve & weight assy. (4742)
3-1339S	Auxiliary throttle shaft, valve & weight assy. (4745, 46)
3-1620S	Primary throttle shaft & lever assy. (4742)
3-1622S	Primary throttle shaft & lever assy. (4745, 46)
4A-175	Primary throttle shaft dog (4742)
4A-205	Primary throttle shaft dog (4745, 46)
7-287	Choke valve (4745, 46)
11B-41	Rivet plug (4742)
11B-79	Rivet plug (2)
11B-389	Idle port rivet plug (2)
11B-391	Nozzle wall plug (2)
11B-406	Secondary passage plug (2)
11B-439	Primary venturi plug (2)
11B-485	Passage plug (4745, 46)
14-512	Outside choke shaft lever (4745, 46)
14-550	Inside choke shaft lever (4745, 46)
14-609S	Choke piston lever, link & pin assy. (4745, 46)
14-907S	Choke lever & shaft assembly (4745, 46)
14-908S	Choke shaft & lever assy. piston housing (4745, 46)
15-52S	Strainer nut assembly (4745, 46)
15-58S	Strainer nut assembly (4742)
16-82X	Step-up rod (.068" X .061") Std. (4742) (2)
16-543	Step-up rod (.069" X .054") Std. (pump side) (4745, 46)
16-544	Step-up rod (.0715" X .058") Std. (opposite pump side) (4745, 46)
17-51	Pump discharge check needle
20-43	Piston housing gasket (4745, 46)
20-127	Strainer nut gasket
20-204	Needle seat gasket (2)
21-179S	Float & lever assembly (2)
24-29	Float lever pin (2)
25-1005S	Needle & seat assembly (flared tip) (2)
30-78	Fuel inlet strainer
30A-204	Idle mixture screw (4745, 46) (2)
47-30	Piston housing welsh plug (4745, 46)
47-34	Spark port welsh plug
47-36	Venturi welsh plug (2)

Part No.	PART NAME
48-264S	Pump jet & housing assembly (4742)
48-294S	Pump jet & housing assembly (4745, 46)
53A-412	Lockout arm & collar assembly (4745, 46)
53A-455	Secondary throttle operating lever
53A-497	Operating lever (bowl vent) (4745, 46)
58-1153S	Secondary venturi (opposite pump) (4745, 46)
58-1154S	Secondary venturi (pump side) (4745, 46)
58-1160S	Secondary venturi (opposite pump) (4742)
58-1161S	Secondary venturi (pump side) (4742)
58-1280S	Primary venturi (opposite pump) (4745, 46)
58-1281S	Primary venturi (pump side) (4745, 46)
58-1282S	Primary venturi (opposite pump) (4742)
58-1283S	Primary venturi (pump side) (4742)
61-171	Pump spring
61-291	Idle speed screw spring
61-585	Step-up rod retaining spring (2)
61-604	Vacuum piston spring (2)
61-618	Secondary throttle return spring
61-649	Throttle flex spring
61-873	Idle mixture screw spring (4745, 46) (2)
61-883	Bowl vent lever spring (4745, 46)
63-144	Delayer plate retainer ring (4745, 46)
63-225	Coil housing retainer (4745, 46)
64-212S	Pump plunger & rod assembly
65-43	Step-up piston cover plate (2)
96-36	Idle mixture screw limiter cap (4745, 46) (2)
101-65	Choke shaft lever screw (4745, 46) (2)
101-74	Throttle shaft lever screw (2)
101-152S	Air horn screw assembly
101-184S	Pump jet housing screw assembly (2)
101-323	Fast idle cam screw (4745, 46)
101-362S	Air horn screw assembly (8)
101-379S	Secondary venturi screw assembly (4)
101-419	Secondary throttle valve screw (4)
101-420	Primary throttle valve screw (4)
101-421	Pump arm screw
101-426	Coil housing screw (4745, 46) (3)
101-431S	Air horn screw assembly
101-436	Piston housing screw (4745, 46) (3)
101-442S	Primary venturi screw assembly (4)
101-452	Idle speed screw
101-453S	Thermostatic valve screw (4745, 46) (2)
101-558	Choke valve screw (4745, 46) (2)
101-560	Step-up piston cover plate screw (2)
101-599	Fast idle speed screw (4745, 46)
103-14	Lead shot (.180")

Part No.	PART NAME	Part No.	PART NAME
103-16	Lead shot (.200")	121-303	Pump jet housing gasket (4742)
108-71	Secondary throttle shaft spacer (2)	121-314	Thermostatic valve gasket (4745, 46)
111-76	Pump arm	121-511	Secondary venturi cluster gasket (4745, 46)
114-144	Primary throttle shaft arm (outer)	121-601	Primary venturi cluster gasket (4745, 46) (2)
114-147	Primary throttle shaft arm (inner)	122-108S	Pump intake ball check assembly
115-308	Throttle operating rod	136-34	Choke piston lever retaining washer (4745, 46)
115-372	Throttle connector rod	136-159	Primary throttle shaft washer
115-374	Fast idle connector rod (4745, 46)	136-160	Secondary throttle shaft washer
115-467	Vent arm connector rod (4745, 46)	136-174	Idle speed screw washer
115-468	Choke connector rod (4745, 46)	150-190	Choke piston pin (4745, 46)
117-190	Pump connector link	150A-10	Pin spring (4742-(3), 4745, 46-(6))
120-377	Secondary metering jet (.077") (1 opposite pump) (4745, 46)	150A-14	Pin spring (4745, 46)
120-389	Secondary metering jet (.089") (4742) (2)	160-137	Choke piston (4746)
120-389	Primary metering jet (.089") (all) (2)	160-207	Step-up piston (2)
120-392	Secondary metering jet (.092") (1 pump side) (4745, 46)	160-312	Choke piston (4745)
121-78	Coil housing gasket (4745, 46)	164-24	Grommet seal (4745, 46)
121-287	Pump jet housing gasket (4745, 46)	169-48S	Thermostatic valve assembly (4745, 46)
121-291	Heat tube cap gasket (4745, 46)	170-1023S	Piston housing & plug assembly (4745, 46)
121-292	Air horn gasket	170AZ-538S	Thermostatic coil & housing assembly (4745, 46)
121-293	Secondary venturi cluster gasket (4742) (2)	181-345S	Fast idle cam assembly (4745, 46)
121-302	Primary venturi cluster gasket (4742) (2)	184-85	Choke heat tube cap (4745, 46)
		186-65	Choke baffle plate (4745, 46)
		186-70	Fuel bowl baffle (2)

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