1975-79 FUEL SYSTEMS
Holley 2210 & 2245 2-Barrel Carburetors

1975-79 Chrysler Corp.
1975-79 International Harvester

CARBURETOR APPLICATION

CHRYSLER CORP.

Application	Part No. Man. Trans.	Part No. Auto. Trans.
1975		
Model 2210		
360-1" V8		
Federal	R-6764A	R-6765A
400" V8		
Federal		R-6886A
Model 2245		
360-1"		
California	R-7187A	R-7188A
360-3"		
Federal	R-7103A	R-7088A
	R-7091A	R-7092A
California	R-7089A	R-7090A
1976		
Model 2210		
Federal		
360"	R-6764A	R-6765A
400"		R-6886A
Model 2245		
360" (Exc. Motor Home)		
Federal		R-7403A
California		R-7188A
360" Motor Home		
Federal		R-7088A
California		R-7090A
1977		
Model 2210		
Federal		
360"	R-6764A	R-7870A
400"	R-6886-1A	R-6886-1A
Model 2245		
360"		
Federal	R-7091A	R-7088A
	R-7103A	R-7092A
	R-7871A	R-7103A
		R-7403A
		R-7871A
		R-8036A
California	R-7698A	R-7697A
		R-7698A
Canada		R-8182A
1978		
Model 2210		
400"		
Federal	R6886-1A	R-6886-1A
Model 2245		
360"		
Federal	R-7871A	R-7871A
		R-8135A
		R-8453A
California	R-8026A	R-8026A
1979		
Model 2245		
360"		
Federal	R-8597A	R-8598A
		R-8925A

INTERNATIONAL HARVESTER CO.

Application	Part No.
1975	
Model 2210	
304" & 345"	6443
1976	
Model 2210	
304"	
Federal	6620-1
California	6620-2, L-7309
345"	
Federal	L-7309, 7133
1977	
Model 2210	
304"	
Federal	R-6620A, R-6620-1A R-6620-2A, R-7309A
345"	
Federal	R-6620A, R-6620-1A R-6620-2A, R-7309A
California	R-7940A
Model 2245	
304"	
California	R-7577A
1978	
Model 2210	
304"	
Federal	6620-1, 7309
California	6620-2, 7309
345"	
Federal	6620-1, 7309
California	6620-2, 7309 7133, 7940, 8241
1979	
Model 2245	
304"	
Federal	7773

CARBURETOR IDENTIFICATION

Part number is stamped on fuel bowl.

DESCRIPTION

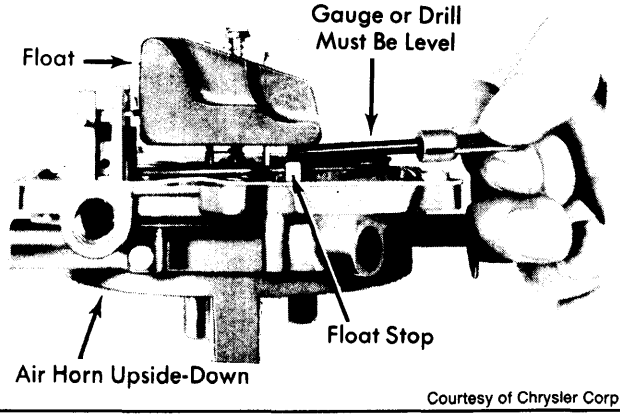
The Holley model 2210 and 2245 carburetors use 5 basic fuel metering circuits: a basic idle system, idle enrichment system, accelerator pump, main metering and power enrichment circuits.

ADJUSTMENTS

NOTE: For all on-vehicle adjustments not covered in this article, see appropriate TUNE-UP article.

FLOAT LEVEL

With air horn removed, invert air horn. Allow weight of floats to gently seat needle valve. Measure clearance between top of float and float stops. *See Fig. 1.* Hold gauge level when checking



Courtesy of Chrysler Corp.

Fig. 1: Adjusting Float Level

Holley 2210 & 2245 2-Barrel Carburetors (Cont.)

clearance. To adjust, bend float tang. See appropriate CARBURETOR ADJUSTMENT SPECIFICATIONS table.

FLOAT DROP

With air horn removed, hold in upright position. Allow floats to hang. Adjust float tang until bottom edge of float should be parallel with gasket surface of air horn. See appropriate CARBURETOR ADJUSTMENT SPECIFICATIONS table. *See Fig. 2.*

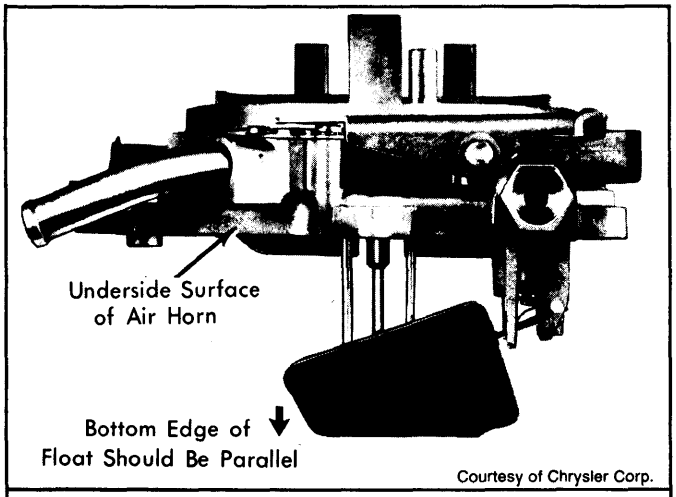


Fig. 2: Adjusting Float Drop

ACCELERATOR PUMP

1) Place throttle lever in curb idle position. Ensure accelerator pump rod is in No. 1 slot in throttle lever. *See Fig. 3.*
2) Using a scale, measure drop (travel) of accelerator pump plunger from curb idle toward open throttle position. If travel is not to specification, bend operating rod. See appropriate CARBURETOR ADJUSTMENT SPECIFICATIONS table.

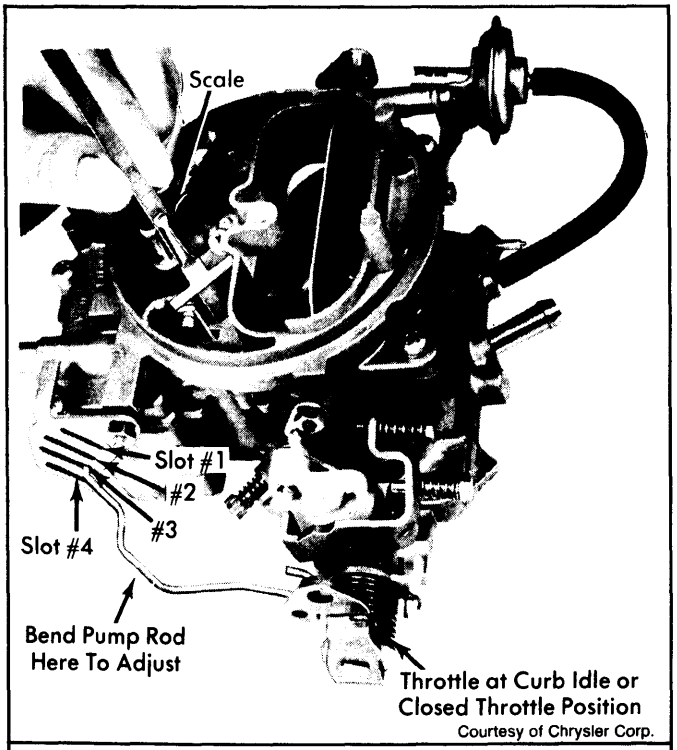


Fig. 3: Adjusting Accelerator Pump Plunger

FAST IDLE CAM POSITION

1) Position fast idle speed screw on second step of fast idle cam against shoulder of highest step. Hold choke valve toward closed position with light finger pressure.
2) Measure fast idle cam specified clearance between upper edge of choke valve and air horn wall. Measurement can be checked using a specified drill or pin gauge.
3) To adjust, bend fast idle cam connector rod at existing bend. See appropriate CARBURETOR ADJUSTMENT SPECIFICATIONS table. *See Fig. 4.*

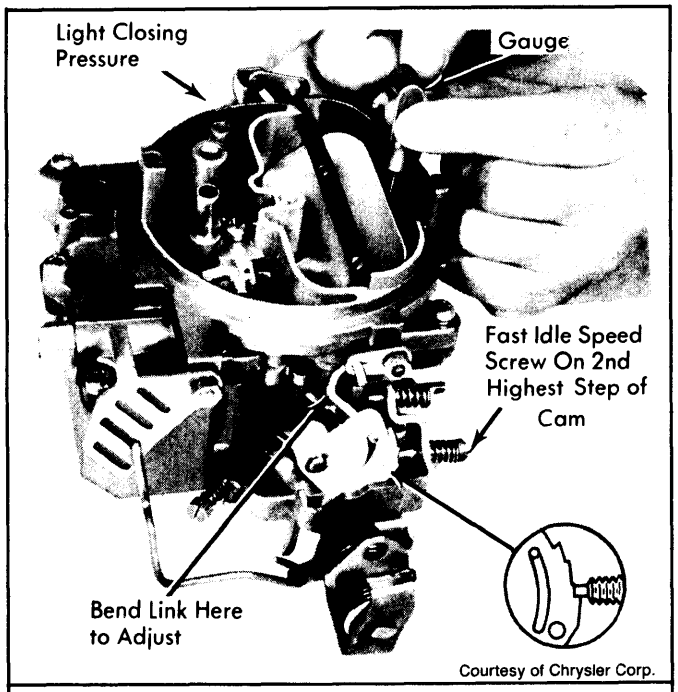


Fig. 4: Adjusting Fast Idle Cam Position

CHOKE VACUUM KICK

1) Open and close throttle. Release throttle to trap fast idle cam at closed throttle position. *See Fig. 5.*
2) Apply outside vacuum source of 15 in. Hg to activate pull-down motor. Apply enough forced to close choke valve with finger without distorting linkage.
3) Measure choke vacuum kick specified clearance between upper edge of choke valve and air horn wall. See appropriate CARBURETOR ADJUSTMENT SPECIFICATIONS table.

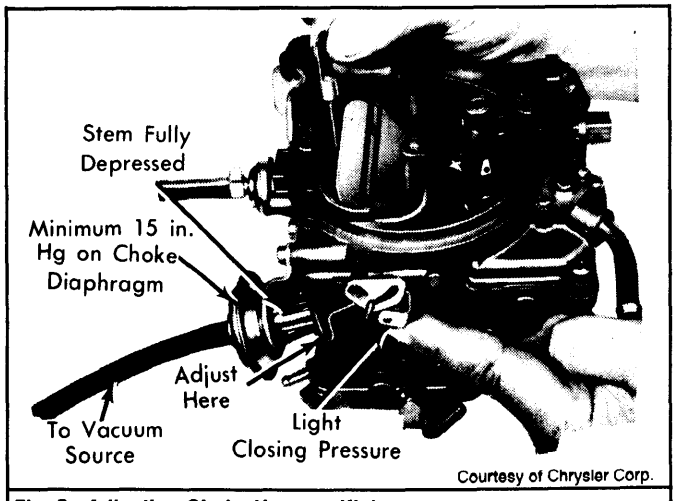


Fig. 5: Adjusting Choke Vacuum Kick

Holley 2210 & 2245 2-Barrel Carburetors (Cont.)

4) To adjust, bend vacuum diaphragm rod at existing "U" bend to obtain specified clearance. Check all linkage for freedom of movement. Install vacuum hose on diaphragm.

CHOKE UNLOADER

1) Hold throttle valves in wide open position. Hold choke valve toward closed choke position by applying light closing pressure to choke lever. *See Fig. 6.*

2) Measure choke unloader specified clearance between upper edge of choke valve and air horn wall. Measurement can be checked using a specified drill or pin gauge. To adjust, bend choke unloader tang. See appropriate CARBURETOR ADJUSTMENT SPECIFICATIONS table.

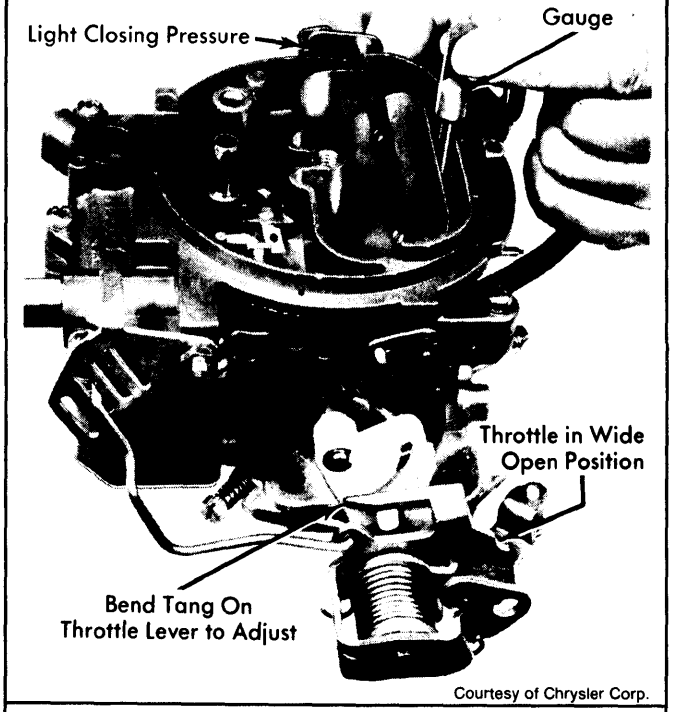


Fig. 6: Adjusting Choke Unloader

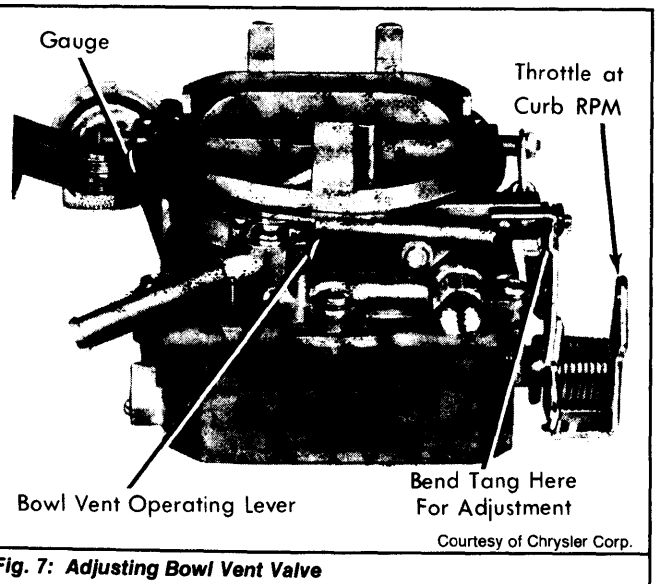


Fig. 7: Adjusting Bowl Vent Valve

BOWL VENT

Place throttle at curb idle position. Measure bowl vent valve specified clearance between vent valve plunger and operating rod. To adjust, bend tang on accelerator pump lever to change arc of contact with throttle lever until correct clearance is obtained. *See Fig. 7.*

IDLE ENRICHMENT VALVE

1) With engine at normal operting temperature, remove air cleaner. Connect a jumper wire from carburetor idle stop switch to ground. Connect a tachometer to engine.

2) Disconnect hose at idle enrichment valve. Start engine and place fast idle speed screw on lowest step of fast idle cam. Apply 3 to 15 in. Hg to idle enrichment valve.

3) If engine speed is controllable with vacuum, valve is working correctly. If not, block air inlet and note engine speed. If speed now changes, diaphragm is defective. If engine does not respond, air valve is stuck closed.

4) Clean valve and repeat steps **2)** and **3)**. If speed still does not respond, replace idle enrichment valve.

OVERHAUL

CARBURETOR

Disassembly - 1) Place carburetor in a stand. Remove idle enrichment diaphragm (if equipped). Remove acelerator pump rod nut and washer. Remove arm from flats on pump shaft, then disengage accelerator pump rod from slot in arm and hole in throttle lever.

2) Remove choke shaft nut and washer. Disengage fast idle connector rod from fast idle cam. Remove choke vacuum diaphragm hose from throttle body. Remove choke diaphragm mounting screws and choke diaphragm.

3) Remove bowl vent valve "E" clip and slide lever from shaft (if equipped). Remove 8 air horn screws and remove air horn. Use care not to damage main well tubes.

4) Push up on accelerator pump plunger and detach plunger from shaft. Slide plunger out of air horn. Remove accelerator pump shaft from air horn. Remove fuel inlet fitting and gasket. With air horn inverted, remove fuel baffle screw.

5) Slide nylon float fulcrum pin out of air horn and remove float. Invert air horn and catch fuel inlet needle. Using a wide blade screwdriver, remove fuel inlet valve. Remove and discard air horn gasket.

6) Using a sharp punch, remove staking around power piston. Depress power piston and allow piston to snap up. Remove power piston and retaining ring. DO NOT attempt to remove main well tubes. Remove bowl vent cover screws and remove valve (if equipped).

7) Remove main metering jets and power valve assembly. Turn main body upside-down and catch accelerator pump discharge needle. Remove throttle body-to-main body screws and separate. Remove "E" clip and remove fast idle cam.

8) Remove idle mixture screw limiter caps. Lightly seat idle mixture screws, counting number of turns for reassembly reference. Remove idle mixture screws and springs.

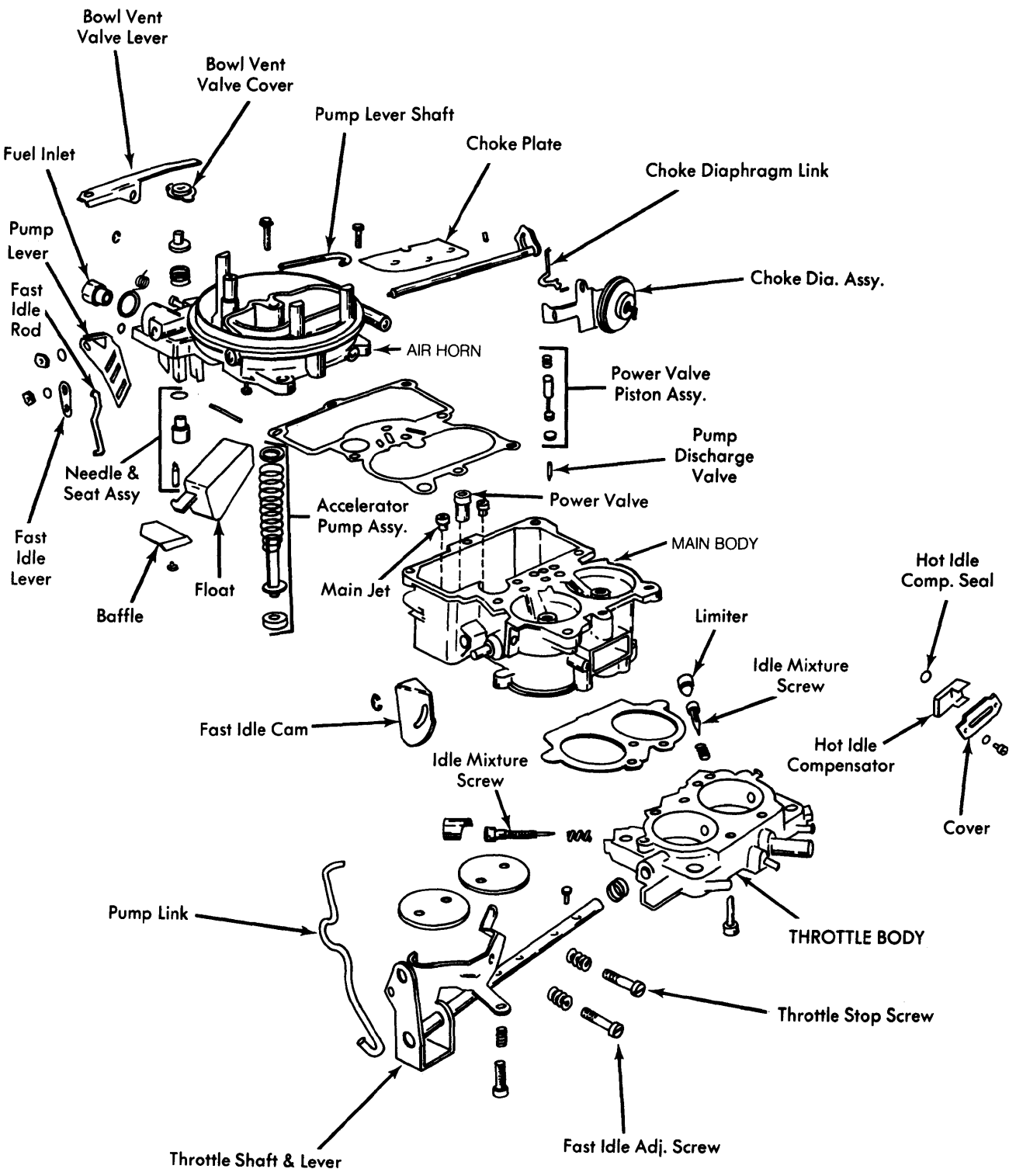
Cleaning & Inspection - Use a regular carburetor cleaning solution. Soak parts long enough to thoroughly clean all passages. DO NOT soak any parts containing rubber, leather or plastic. Remove all cleaning residue after soaking by rinsing parts in clean solvent. Blow out all passages with compressed air.

Reassembly - 1) To reassemble, reverse disassembly procedure. Remove all staking around vacuum piston ring groove in air horn. Lightly seat idle mixture screws, then back out number of turns noted during disassembly.

2) When installing accelerator pump discharge needle, check for proper sealing. Hold accelerator pump discharge needle down with brass rod. With gasoline in float bowl, install accelerator pump in well and operate by hand. If no resistance is felt, needle is leaking at seat.

3) Remove new accelerator pump discharge needle and install old needle. Using a small drift punch, lightly tap on old needle to form a new seat. Remove old needle. Install new needle and perform leak test. If still leaking, replace carburetor.

1975-79 FUEL SYSTEMS
Holley 2210 & 2245 2-Barrel Carburetors (Cont.)



Courtesy of Chrysler Corp.

Fig. 8: Exploded View of Holley 2245 2-Barrel Carburetor

Holley 2210 & 2245 2-Barrel Carburetors (Cont.)

1975 CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carb. No.	Idle Speed (Engine RPM)		Accel. Pump Setting	Float Setting	Fast Idle Cam Setting	Vacuum Kick Setting	Choke Unloader Setting
	Hot	Fast					
Model 2210							
R-6764A	750	1700	.260"①	.180"	.110"	.150"	.170"
R-6765A	750	1800	.260"①	.180"	.110"	.150"	.170"
R-6886A	700	1600	.270"	.180"	.110"	.150"	.170"
6443 (I.H.)	575②	2200	.550"	.200"	.101-.131"	.115-.145"	.198-.258"
Model 2245							
R-7088A	750	1600	.260"①	.180"	.110"	.150"	.170"
R-7089A	750	1600	.260"①	.180"	.110"	.150"	.170"
R-7090A	700	1600	.260"①	.180"	.110"	.150"	.170"
R-7091A	750	1600	.260"①	.180"	.110"	.150"	.170"
R-7092A	750	1600	.260"①	.180"	.110"	.150"	.170"
R-7187A	700	1600	.260"①	.180"	.110"	.150"	.170"
R-7188A	700	1600	.260"①	.180"	.110"	.150"	.170"
R-7103A	750	1600	.260"①	.180"	.110"	.150"	.170"

① — Specification given is from curb idle. From closed throttle, use .310".
② — Throttle stop solenoid deactivated.

1976 CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carb. No.	Idle Speed (Engine RPM)		Accel. Pump Setting	Float Level Setting	Fast Idle Cam Setting	Vacuum Kick Setting	Choke Unloader Setting
	Hot	Fast					
Model 2210	650-700	2200	.700"	.180"	.116"	.110"	.198-.258"
6620-1	650-700	2200	.700"	.180"	.116"	.110"	.198-.258"
6620-2	750	1700	.270"①	.180"	.110"	.150"	.170"
R-6764A	750	1800	.260"①	.180"	.110"	.150"	.170"
R-6765A	700	1400	.260"①	.180"	.110"	.150"	.170"
R-6886A	625-675	2000	.700"	.180"	.116"	.150"	.198-.258"
7133	625-675	2000	.700"	.180"	.116"	.150"	.198-.258"
L7309							
Model 2245	750	1800	.260"①	.180"	.110"	.150"	.170"
R-7088A	700	1800	.260"①	.180"	.110"	.150"	.170"
R-7090A	700	1600	.260" ①	.180"	.110"	.150"	.170"
R-7188A	750	1600	.260" ①	.180"	.110"	.150"	.170"
R-7403A							

① — Specifications given are for curb idle, closed throttle specification is .320" on R-6764A and .310" on all others.

1975-79 FUEL SYSTEMS
Holley 2210 & 2245 2-Barrel Carburetors (Cont.)

1977 CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carb. No.	Idle Speed (Engine RPM)		Accel. Pump Setting **	Float Setting	Fast Idle Cam Setting	Vacuum Kick Setting	Choke Unloader Setting	Bowl Vent Clearance
	Hot	Fast						
Model 2210								
R-6620A	650-700	2200	.700"	.180"	.116"	.110"	.198-.258"	.....
R-6620-1A	650-700	2200	.700"	.180"	.116"	.110"	.198-.258"	.....
R-6620-2A	650-700	2200	.700"	.180"	.116"	.110"	.198-.258"	.....
R-6764A	750	1700	.320"③	.180"	.110"	.150"	.170"	.....
R-6886-1A	②	1600①	.260"④⑤	.180"	.110"	.150"	.170"	.....
R-7309A	625-675	2000	.700"	.180"	.116"	.150"	.198-.258"	.....
R-7870A	②	1800	.260"④⑤	.180"	.110"	.090"	.170"	.....
R-7940A	②	②	.....	.....	.....	.....	.....	.....
Model 2245								
R-7088A	②	1600	.260"④	.180"	.110"	.150"	.170"	.....
R-7091A	②	1600	.....	.180"	.110"	.150"	.170"	.....
R-7092A	②	1600	.260"④	.180"	.110"	.150"	.170"	.....
R-7103A	②	1600	.270"③	.180"	.110"	.150"	.170"	.....
R-7403A	②	1600	.260"④	.180"	.110"	.150"	.170"	.025"
R-7577A	②	.....	.....	.....	.....	.....	.....	.....
R-7697A	②	1600	.260"④⑤	.180"	.110"	.150"	.170"	.....
R-7698A	②	1600	.270"③	.180"	.110"	.150"	.170"	.....
R-7871A	②	1600	.260"④⑤	.180"	.110"	.130"	.170"	.....
R-8036A	②	1600	.310"④	.180"	.110"	.150"	.170"	.025"
R-8182A	②	1600	.310"④	.180"	.110"	.150"	.170"	.025"

① — 1400 RPM on B & C models.
② — See Emission Control Tune-Up Decal.
③ — Use pump lever Slot #2.
④ — Use pump lever Slot #1.
⑤ — "A" models — .310", use pump lever Slot #1.
** — Specifications given are for curb idle. Closed throttle specification is .320" on R-6764A and .310" on all others.

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carb. No.	Idle Speed (Engine RPM)		Accel. Pump Setting	Float Setting ①	Fast Idle Cam Setting	Vacuum Kick Setting	Choke Unloader Setting	Bowl Vent Clearance
	Hot	Fast						
Dodge & Plymouth Model 2210								
R-6886-1A	700	1600①	.260"②	.180"	.110"	50"	.170"	.....
Model 2245								
R-8453A	750	1600①	.260"	.200"	.110"	.150"	.170"	.025"
R-8135A	750	1600①	.260"	.200"	.110"	.150"	.170"	.025"
R-7871A	750	1700①	.260"②	.180"	.110"	.150"	.170"	.....
R-8026A	700	1600①	.260"③	.180"	.110"	.150"	.170"	.025"
IHC Model 2210								
6620-1	650-700	2200	④	.180"	.....	.....	.198-.258"	.....
7309	650-700	2200	④	.180"	.....	.....	.198-258"	.....
6620-2	650-700	2200	④	.180"	.....	.....	.198-.258"	.....
7133	650-700	2200	④	.180"	.....	.....	.198-.258"	.....
7940	650-700	2200	④	.180"	.....	.....	.198-.258"	.....
8241	650-700	2200	④	.180"	.....	.....	.198-.258"	.....

① — RPM after 300 miles.
② — Curb idle given. Closed throttle No. 1 slot .310".
③ — Curb idle given. Closed throttle No. 1 slot .265".
④ — IHC No. 2 slot. Measurement not available.

Holley 2210 & 2245 2-Barrel Carburetors (Cont.)

1979 CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Float Level Setting	Float Drop Setting	Accel. Pump Setting	Fast Idler Cam Setting	Choke Vacuum Kick Setting	Choke Unloader Setting	Bowl Vent Valve Setting
Chrysler Corp.							
R-8597A	13/64"	Parallel	19/64" ①	.110"	.110"	.170"	.025"
R-8598A	13/64"	Parallel	19/64"	.110"	.110"	.170"	.025"
R-8925A	13/64"	Parallel	19/64"	.110"	.110"	.170"	.025"
International Harvester							
7773	11/64"	Parallel	45/64" ②	.110"	.120"	.230"	.....

① — In slot 1.
② — In slot 2.