1970-72 HOLLEY 2210 2-BARREL

CHRYSLER CORP.

Application	Man. Trans.	Auto. Trans.
Holley Carburetor No.		
1970		
383" V8		R-4371A
1971		
360" V8	R-4665A	R-4666A
1972		
360" V8 (Except Calif.)		R-6164A
(Calif. Only)		R-6162A
400" V8 (Except Calif.)		R-6368A
(Calif. Only)		R-6370A

▶ CHANGES, CAUTIONS, CORRECTIONS

▶ *1970 R-4371A CARBURETOR NOTE* – Carburetor is "C.A.S." (Cleaner Air System) type and does not conform to "E.C.S." (Evaporation Control System) emission standards. Fuel bowl is vented to underhood air.

▶ *AUTOMATIC CHOKE "WELL" CAUTION* – New type removable stainless steel choke well was incorporated in 1970 and subsequent engines. Loosening or removing choke retainer bolts will allow exhaust gasses to escape into engine compartment. *Do not run engine unless choke firmly bolted to manifold. Fire or heat damage may occur.*

▶ *1971 383" ENGINE & CARTER/HOLLEY CARBURETOR NOTE* – During the 1971 Model Year a number of vehicles with 383" engines and Auto. Trans., normally equipped with Carter BBD 2-Bbl. carburetors, were produced with Holley 2210 No. R-4373A (see Specifications) due to a shortage of Carter Carburetors.

CARBURETOR IDENTIFICATION

Holley part number stamped on fuel bowl. Prefix letter "R" indicates complete carburetor assembly. Suffix letter "A" indicates an assembly. A suffix numeral indicates modification from original specifications.

DESCRIPTION

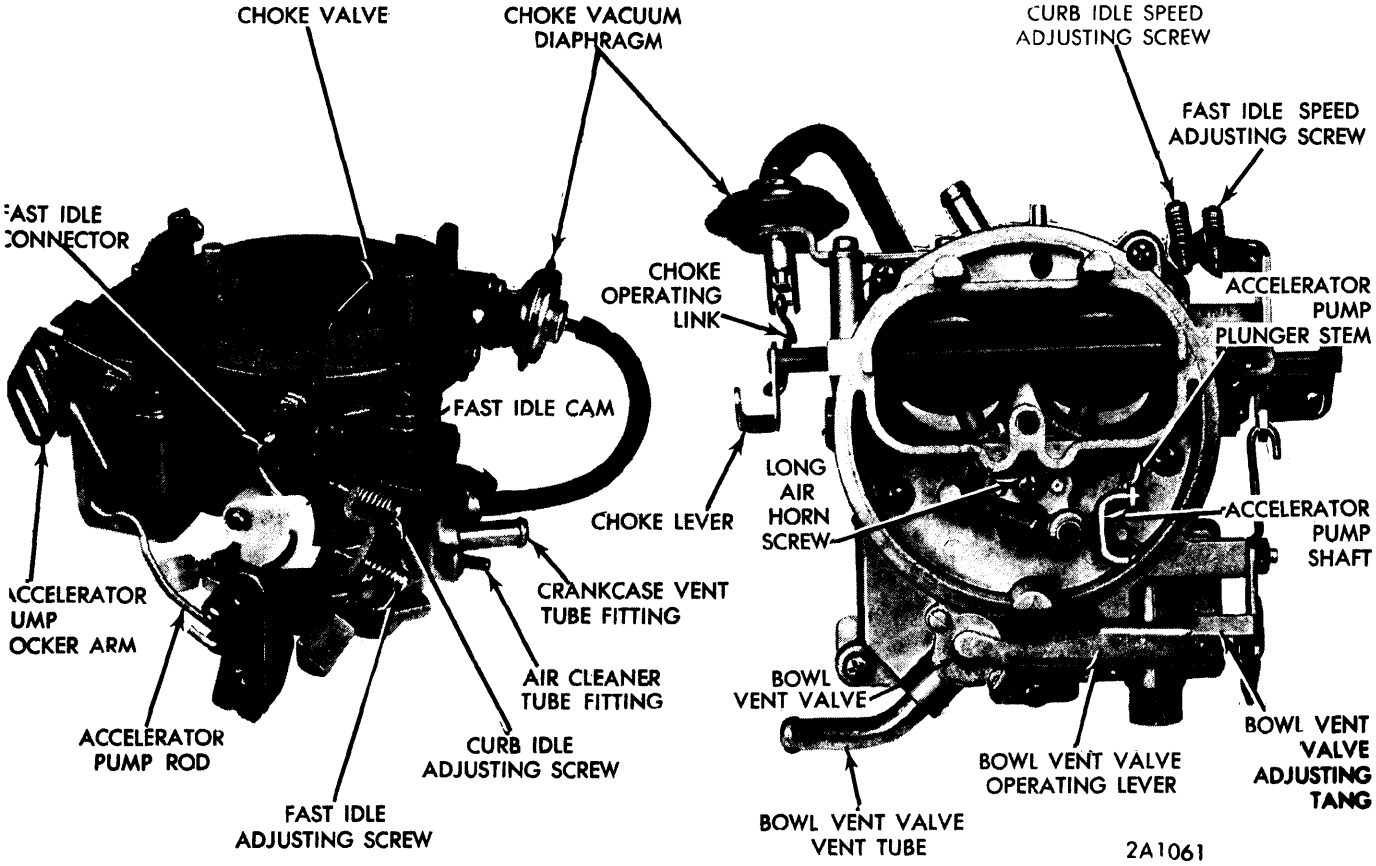
2-Bbl. downdraft of conventional design. Each throat of carburetor has its own throttle valve and main metering systems and are supplemented by the float, accelerating, idle and power systems. A choke valve in air horn is operated by remote thermostatic coil and choke rod. Automatic choke "well" may be cast as an integral part of the exhaust manifold, or may be a stainless steel cup fastened over a port in the manifold.

ADJUSTMENT

Idle Speed & Mixture

Set the following conditions before making adjustments. Engine running at normal operating temperature automatic transmission in NEUTRAL (not PARK), air cleaner in position, timing set to specification, A/C OFF.

Idle Speed – Use idle speed stop screw to obtain specified idle RPM (see Specifications).



HOLLEY CARBURETOR MODEL 2210 (TYPICAL)

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CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carb. No.	Idle Speed (Engine RPM)		④ Float Setting	Float Drop	Fast Idle Cam Setting ④	Accel. Pump Plunger Stem	Accel. Pump Connector	Vacuum Break Setting	Choke Unloader Setting
	Hot①	Fast②							
R-4371A	650	1700	#7	③	#35	9/16"	#2	#28	11/64"
R-4373A	650	1700	#7	③	#35	9/16"	#2	#28	11/64"
R-4665A	750	1800	#15	③	#35	9/16"	#2	#28	11/64"
R-4666A	700	1800	#15	③	#35	9/16"	#2	#30	11/64"
R-6162A	700	2000	#15	③	#35	9/32"	#1	#30	11/64"
R-6164A	700	1900	#15	③	#35	1/4"	#3	#30	11/64"
R-6368A	700	1900	#15	③	#35	9/32"	#1	#28	11/64"
R-6370A	700	2000	#15	③	#35	9/32"	#1	#28	11/64"

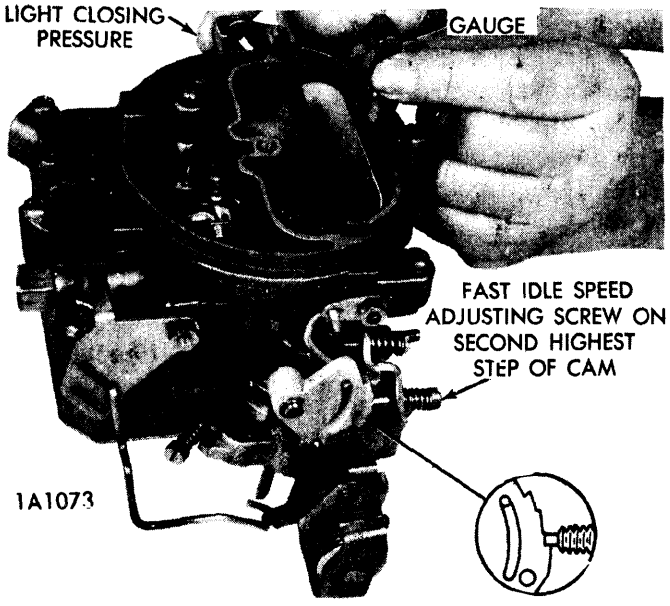
① – Auto. Trans. in "N", air cleaner installed, A/C OFF.
② – Fast idle screw on second step of fast idle cam.
③ – Air horn upright. Bottom of float parallel with air horn underside surface.
④ – Drill size.

►*NOTE – Do not attempt to adjust or tamper with idle mixture screws locked in position with plastic limiter caps. If limiter caps and idle mixture screws are removed for carburetor overhaul, fuel bowl or throttle body replacement, special procedure is required to correctly readjust idle mixture screws.*

Idle Mixture – Mixture adjusting screw has limiter cap installed which limits range of adjustment. *DO NOT remove this cap.* Chrysler Corp. recommends that idle mixture be adjusted with the aid of an exhaust analyzer.

Fast Idle Speed & Cam Position

Fast idle speed adjustment must be made on car with engine running. Cam position adjustment should be made first, and can be performed either on the vehicle or on the bench.



FAST IDLE CAM POSITION ADJUSTMENT

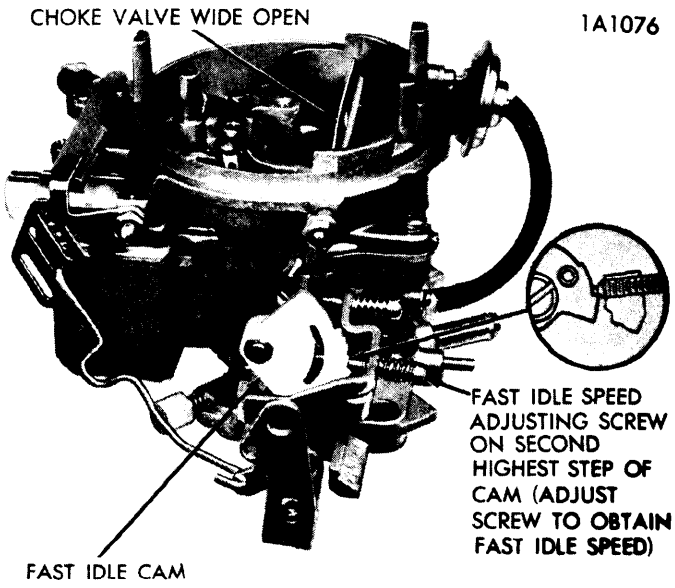
Cam Position – With fast idle speed adjusting screw on second highest speed step of fast idle cam move choke valve toward closed position with light pressure on choke lever. Insert drill gauge (see Specifications) between top of choke valve and air horn. If slight drag not obtained as gauge removed adjust clearance by bending connector rod at angle.

Fast Idle Speed – With engine at normal operating temperature but not running and transmission in Park or Neutral, and with curb idle speed and mixture at specifications proceed as follows:

1) Open throttle slightly and close choke valve to position fast idle adjusting screw on second highest speed step of fast idle cam.

2) Start engine and determine stabilized RPM. Adjust fast idle speed screw to secure specified fast idle RPM. (See Specifications).

3) Reposition fast idle speed screw on cam after each adjustment to provide correct throttle closing torque.



FAST IDLE SPEED ADJUSTMENT

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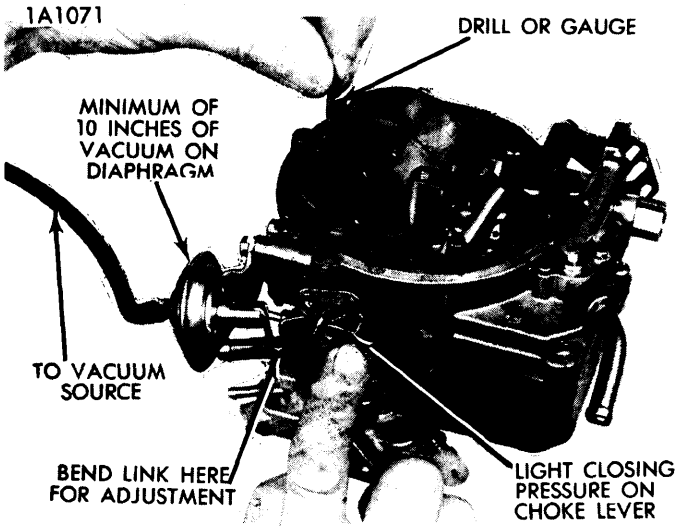
Automatic Choke

Choke control is serviced as an assembly. DO NOT attempt to repair or change choke setting. If unit binds or does not function properly, a new unit should be installed. *CAUTION – Loosening or removing choke retainer bolts when working with the stainless steel cup type choke will allow exhaust gases to escape into engine compartment. DO NOT RUN ENGINE UNLESS CHOKE FIRMLY BOLTED TO MANIFOLD.*

Vacuum Break (Kick)

NOTE – Adjustment can be made on or off car, using an auxiliary vacuum source (distributor test machine, or another vehicle), or on the car with engine running. When using auxiliary vacuum source, remove vacuum break hose from carburetor, NOT from vacuum break diaphragm.

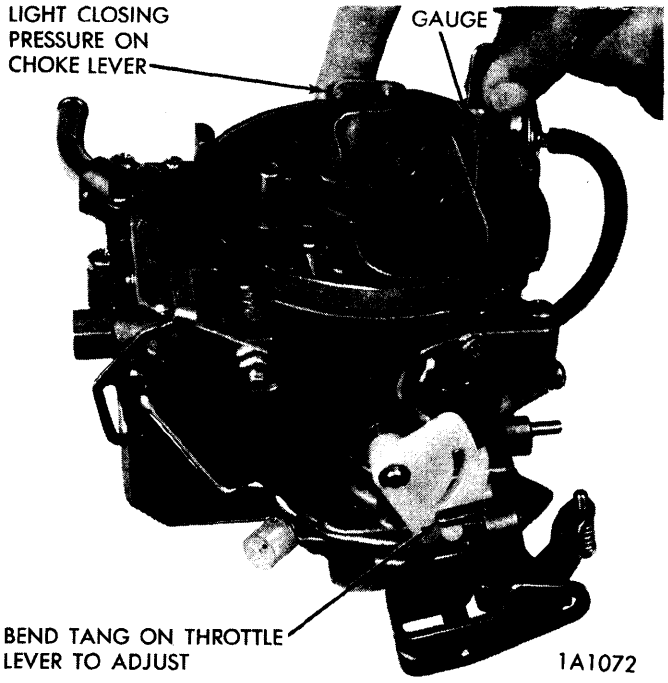


VACUUM BREAK (KICK) ADJUSTMENT

If adjustment is made with engine running, back off fast idle screw until choke will close to kick position with engine at curb idle (note number of turns, to properly reset fast idle after adjustment). If auxiliary vacuum source is used, open throttle valve (engine not running) and move choke to closed position. Release throttle, then release choke. Apply a minimum of 10" or more of mercury. Insert drill (see Specifications) between top of choke valve and wall of air horn. Apply sufficient pressure on choke rod lever to give minimum choke valve opening without distorting diaphragm link. *NOTE* – Diaphragm internal spring *must be fully compressed, as will be noted by extension of diaphragm stem.* A slight drag should be felt as drill is withdrawn, if not, adjust by opening or closing U-bend in diaphragm link. *CAUTION – Do not apply twisting or bending force to diaphragm.*

Choke Unloader

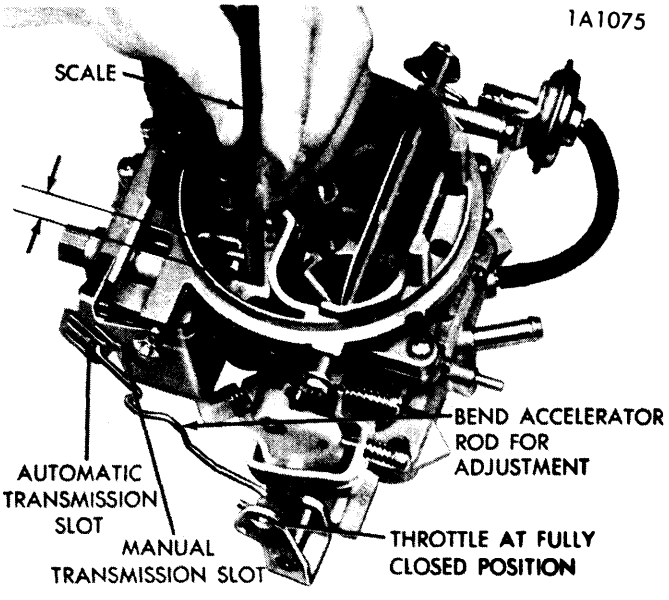
With throttle valves wide open insert drill gauge (see Specifications) between upper edge of choke valve and air horn. With slight pressure on choke shaft lever, slight drag should be felt as gauge removed. Bend unloader tang on throttle lever if adjustment needed.



CHOKE UNLOADER ADJUSTMENT

Accelerator Pump

Seat throttle valves in bores by backing off curb idle speed screw and opening choke valve. Pump connector rod must be installed in correct slot of accelerator pump rocker arm (see Specifications). Measure distance between top of air horn and end of plunger shaft (see Specifications). If adjustment is required, bend pump operating rod, at loop of rod, until correct setting has been obtained.



ACCELERATOR PUMP ADJUSTMENT

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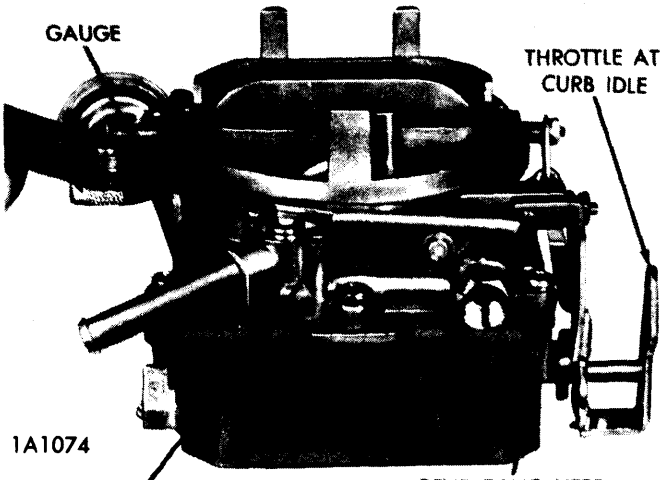
BOWL VENT

With throttle valves at curb idle, measure clearance between vent valve plunger stem and operating rod (between vent valve and seat on air horn on 1970 models). Bend tang on pump lever to change arc of contact with throttle lever until correct clearance (see Specifications) has been obtained.



BOWL VENT ADJUSTMENT

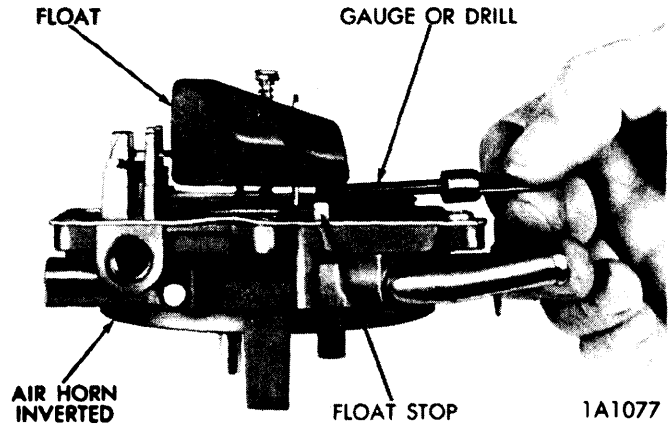
Float Setting

NOTE – When measuring float setting, be sure that weight of float only is forcing needle on seat.

With air horn inverted measure clearance between top of float and float stop (see Specifications). Drill or gauge must be perfectly level when measuring. Bend float lip as required if adjustment necessary.

Float Drop

With air horn in normal position bottom edge of float should be parallel to underside surface of air horn. Bend tang on float arm to obtain correct adjustment



FLOAT LEVEL ADJUSTMENT

OVERHAUL

Disassembly

With carburetor mounted on elevating legs (so as not to damage throttle valves and provide a suitable working base), remove pump rocker arm from flats on pump shaft, disengage accelerator pump rod from center slot in arm and from hole in throttle lever and proceed as follows:

1) Remove nut and washer that attaches choke lever to choke shaft. Disengage fast idle connector rod from lever and fast idle cam. Remove vacuum diaphragm hose from throttle body fitting. Remove choke diaphragm and mounting bracket screws from air horn.

2) Remove choke diaphragm, and at the same time, disengage choke operating link from the choke operating lever. Set choke unit aside for separate cleaning. *CAUTION – A liquid cleaner may damage the diaphragm material.* Remove retaining clip that retains bowl vent valve lever on stub shaft on air horn. Slide lever off shaft, being careful not to lose lever spring (note position of spring).

3) Remove air horn attaching screws (8) and lift air horn straight up from main body. *CAUTION – Use extreme care in handling air horn so as not to bend or damage main well tubes.*

4) Disengage accelerator pump plunger from pump shaft by pushing up on bottom of plunger, then tilting slightly toward center, then slide off pump shaft. Slide plunger stem from air horn and remove compression spring. Slide pump shaft out of air horn.

5) Remove fuel inlet fitting and gasket. Invert air horn and remove screw that attaches fuel baffle to air horn. Remove float and fuel inlet needle, then remove needle valve seat.

6) Using a special tool (C-4141), remove vacuum power piston. The assembly is staked in position and the staking must be removed, using a suitable sharp tool. *WARNING – Do not attempt to remove main well tubes from air horn since they are a press fit.*

7) Remove bowl vent valve cover and remove vent valve, spring and seal. Remove seal from bottom of valve. Remove main metering jets and power valve assembly. Invert main body and drop out accelerator pump discharge check needle from discharge passage.

8) Remove fast idle cam from stub shaft. Remove throttle body from main body. Turn idle limiter caps to stop (top on throttle side and bottom of stop on choke side). Remove limiter plastic caps. Count number of turns to seat the screws. Same number of turns (from the seat) must be maintained when carburetor is reassembled. Remove idle mixture screws.

Cleaning

1) Clean carburetor parts either in denatured alcohol or suitable carburetor cleaning solvent. Avoid placing the plastic parts or diaphragm in ANY liquid. Clean the external surfaces of plastic components and the vacuum diaphragm with a clean cloth or soft brush. Depressing the stem of the diaphragm will afford an additional hole for the removal of dirt. *NOTE – Compressed air can be used to remove loose dirt but should not be connected to the vacuum diaphragm fitting.*

2) If a commercial cleaner or solvent recommends the use of water as a rinse, it should be HOT. After rinsing, all traces of water must be blown from the passages with air pressure. It is recommended to further rinse all parts in clean kerosene or gasoline.

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3) Under no circumstances should jets or orifices be cleaned with a wire or drill. Such a procedure may enlarge the jets or orifices and destroy the factory calibration.

Reassembly

Reverse disassembly procedure, using all new gaskets. Note the following:

1) If the tapered portion of the idle mixture screws is grooved or ridged, install a new screw. Turn screws lightly against their seat with fingers (DO NOT USE A SCREWDRIVER). Back off the number of turns (from the seat) counted at disassembly. Install new limiter caps with tab against stop (screws should be equal number of turns on both sides).

2) Test freeness of choke mechanism in air horn. Choke shaft must float free in bearing bores.

3) When installing vacuum power piston in its cylinder, lock in position by prick punching rim of cylinder in at least three places. Compress piston to be sure no binding exists.

4) Before installing air horn, adjust float setting. Invert air horn so that weight of float only is forcing needle against seat. Measure the clearance between top of float and float stop. Clearance should be .200" (#7 drill)(13/64"). Hold air horn in upright position and check float drop. Bottom edge of float should be parallel to underside surface of air horn. Bend tang on float arm to adjust.

5) Test the vacuum diaphragm before installing on the air horn. Depress the diaphragm stem, then place finger over the fitting to seal the opening. Release the stem. If the stem moves more than 1/16" in 10 seconds, replace the diaphragm.