

1971 HOLLEY 4150 & 4160 4-BARREL

CHEVROLET

Carb. Model 4150	Holley Carburetor No. ①	
	Synchro-mesh	Auto. Trans.
350" 330 HP V8	R-4801A	R-4800A
Corvette	R-4801A	
454" 425 HP V8	R-4803A	R-4802A

CHRYSLER CORP.

Carb. Model 4160		
383" V8 Engine - Heated Air ...	R-6191A	R-4668A
Fresh Air ...	R-6193A	R-4735A

FORD MOTOR CO.

Carb. Model 4150-C		
302" High Output V8 Engine	DIZF-VA	
429" Super Cobra Jet V8	DIZF-YA	DIZF-XA

① Or Ford Autolite part No.

► CHANGES, CAUTIONS, CORRECTIONS

► **1971 CHRYSLER 383" ENGINE LAG CORRECTION** - If a complaint of engine stumble or lag during light to medium acceleration can not be corrected by making all proper tune-up adjustments, install Parts Kit No. 3683830 in the Holley Model 4160 carburetor. Full procedure and specification instructions are included in the kit.

CARBURETOR IDENTIFICATION

All Carburetors (except Ford) - Holley part number is stamped on fuel bowl. Complete number (R3230A) may not appear on carburetor ("R" indicates carburetor, "A" indicates assembly). A suffix number ("-1" etc.) indicates modifications in basic design or specifications.

Ford Carburetors - Ford number prefix and suffix is stamped on choke valve flange (Example "C5AF BD").

DESCRIPTION

CHEVROLET - Carburetors are equipped with a Combined Emission Control Valve (C.E.C.) rather than an idle retard dashpot or idle stop solenoid. The C.E.C. Valve is mounted on the carburetor body and is actuated by a transmission switch. The Valve is a dual purpose unit consisting of a solenoid plunger and a vacuum valve also operated by the solenoid. When energized, the solenoid plunger is extended and increases normal engine idle speed during high gear operation to help in controlling overrun hydrocarbons during deceleration. The solenoid further provides for operation of the vacuum valve which is opened when the solenoid is energized to supply vacuum to the distributor vacuum advance to obtain full spark advance during high gear operation.

When de-energized, the solenoid permits normal (curb) idle speed to be resumed in the lower gears and at idle provides retarded ignition timing (no vacuum to distributor) for improved emission control. **NOTE** - *Curb idle speed is obtained by idle stop screw adjustment. See Adjustments.*

CHRYSLER - Carburetors are equipped with enclosed bowl vent valve connected by a hose to the oil filler cap. A hot idle compensator valve is mounted on the side of the main body casting. This thermostatically operated valve bleeds fresh air through a port below the throttle valves to relieve an overrich condition at idle due to excessive heat.

Carburetors used on vehicles with manual transmissions are equipped with an idle stop solenoid. The solenoid is energized whenever the ignition switch is ON, and is adjusted to obtain the "fast" curb idle speed. When the

ignition switch is turned off, the solenoid is de-energized and allows the throttle valves to further close to a "slow" curb idle speed. This slower idle speed setting of the throttle valves prevents "dieseling" or after-running.

All carburetors are equipped with a distributor ground switch. The switch operates a solenoid mounted on the distributor to control the vacuum supply to the vacuum advance diaphragm. At engine idle speed the switch is closed, and retards the distributor for better emission control. When the engine is operating at any speed off idle, the switch is open and distributor advance is obtained.

FORD MOTOR CO. - Carburetors used on 302" High Output engines use a manually operated choke valve. Carburetors used on 429" Super Cobra Jet engines are equipped with an integral type automatic choke assembly mounted on side of main body. Choke assembly contains cylinder and piston to operate vacuum choke break. Carburetors used on vehicles with manual transmission are equipped with idle retard dashpots. Vehicles with automatic transmission use carburetors equipped with idle stop solenoid.

CHEVROLET & CHRYSLER CORP. CARBURETORS - These carburetors have vacuum diaphragm type "Vacuum Break (Kick)" instead of vacuum piston enclosed in housing of integral type choke assembly. Further, these carburetors make use of a remote thermostatic choke coil to operate and control their choke valves.

ADJUSTMENT

Idle Speed & Mixture

Chevrolet - Set the following conditions: Engine at normal operating temperature, distributor vacuum hose disconnected and plugged, "fuel tank" line disconnected from vapor canister (do not remove line on Corvette, remove gas tank cap), manual transmission in Neutral, automatic transmission in Drive. Adjust as follows:

350' Engine - Camaro - Adjust mixture screws to obtain maximum RPM, then adjust carburetor speed screw to obtain specified RPM (see Specifications).

350' Engine - Corvette - Adjust carburetor speed screw to obtain specified RPM (see Specifications). Turn one mixture screw in to obtain a 20 RPM drop; then back screw out ¼ turn. Repeat mixture adjustment on second mixture screw; then adjust idle speed screw to specified RPM.

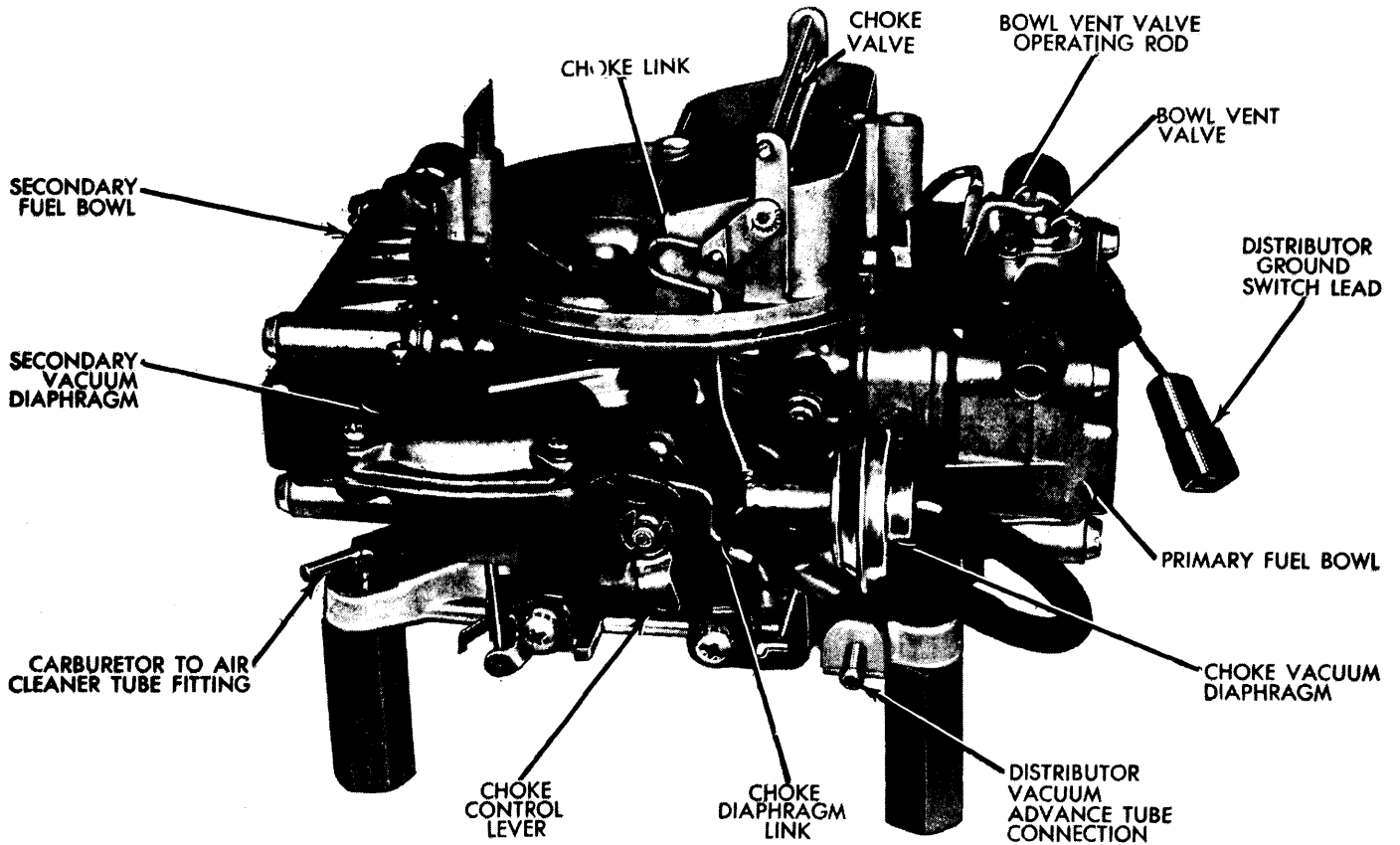
454" Engine (Except Corvette) - Adjust mixture screws to obtain maximum RPM, then adjust carburetor speed screw to obtain specified RPM (see Specifications). Turn mixture screw in to obtain a 20 RPM drop; then back screw out ¼ turn - repeat for second screw. Readjust carburetor speed screw to obtain specified RPM.

454" Engine (Corvette) - Adjust carburetor speed screw to obtain specified RPM (see Specifications).

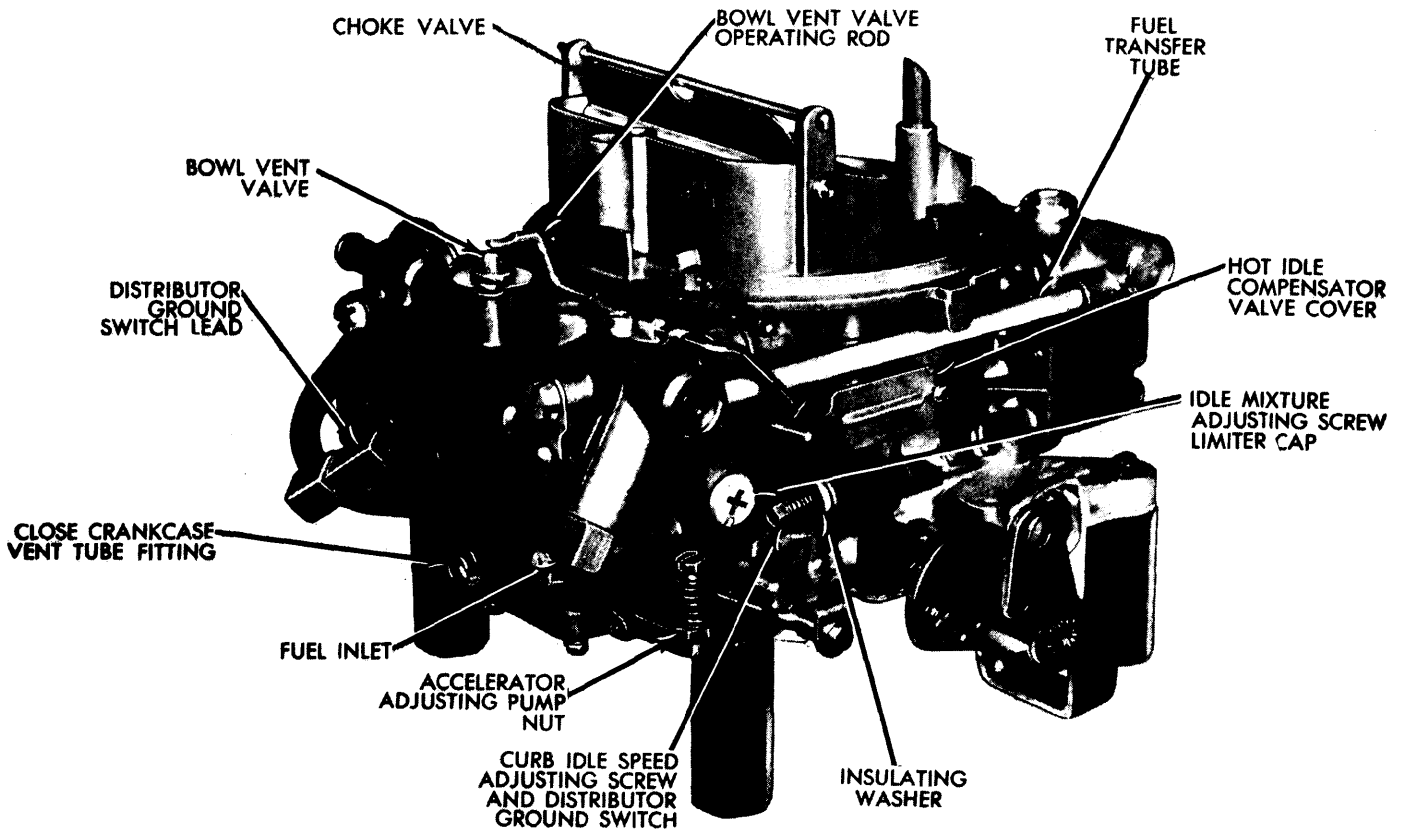
CAUTION - *When adjusting idle speeds and mixtures on ANY Chevrolet vehicle, DO NOT adjust solenoid (C.E.C. Valve) screw.*

Holley Carburetors

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HOLLEY CARBURETOR MODEL 4160

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Chrysler Corp. - Exhaust Gas Analyzer must be used to ensure correct air-fuel ratio.

Ford Motor Co. - Set the following conditions: Ignition timing and distributor specifications checked, manual transmission in Neutral, automatic transmission in Drive, headlights On in high beam position, A/C OFF, air cleaner in position. If necessary, air cleaner may be removed to make adjustment, but must then be replaced for final check. Proceed with adjustment as follows:

1) With the curb idle speed screw, adjust idle speed to specified RPM (see specifications).

2) On carburetors equipped with idle stop solenoid, turn the solenoid plunger screw in or out to obtain specified idle RPM (see Specifications). Then disconnect the solenoid lead wire at the bullet connector near the loom and adjust the carburetor throttle stop screw to obtain the specified RPM.

3) Turn one idle mixture adjusting screw inward to obtain the smoothest idle possible within range of limiter cap on screw. Turn idle mixture screws inward an equal amount.

Fast Idle

NOTE - Make this adjustment after hot or slow idle speed and idle mixture adjustment have been made. Adjust each model as follows:

Chevrolet - With engine at normal operating temperature and idling with choke valve wide open, position fast idle lever on high step of fast idle cam, bend fast idle lever as required for correct fast idle speed (see Specifications).

Chrysler Corp. - With engine at normal operating temperature and idling with transmission in Park or Neutral, position fast idle tang on second highest step of fast idle cam. If fast idle speed not correct (see Specifications), adjust by bending fast idle tang **perpendicular** to surface of fast idle cam. **CAUTION** - Bending tang in any other manner will change Fast Idle Cam Position adjustment (see "Off Engine" adjustments).

Ford Motor Co. - With engine at normal operating temperature, air cleaner removed, and tachometer connected, rotate the fast idle cam until the fast idle adjusting screw rests on the highest step of the cam. Turn adjusting screw to obtain specified fast idle RPM. (see Specifications).

Accelerating Pump

Override Adjustment - Hold throttle valves wide open, manually depress pump diaphragm actuating lever. In this position, clearance between head of operating lever adjusting screw and pump arm should be .015" (all carburetors). Adjust by turning the adjusting screw (one-half turn of screw is equal to .015"). Check pump action by fully closing throttle valves and then opening the valves. Slightest movement of throttle lever should cause corresponding movement of pump lever (lag will result in a top-in stumble or flat spot). Correct by lengthening adjusting screw.

CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carburetor No. ①	Idle Speed (Engine RPM)		Initial Idle Mix. Setting	Float Setting		Fast Idle (Off Eng.) Setting	Unloader Setting	Vacuum Break Setting	Auto. Choke Setting
	Hot	Fast		Primary	Secondary				
R-4668A	800	1700	⑦	15/64" ⑨	17/64" ⑨	#53	#25	#46	2 - Rich
R-4735A	800	1700	⑦	15/64" ⑨	17/64" ⑨	#53	#25	#46	2 - Rich
R-4800A	700	2200	②	③ ④	③ ④	.025"	.350"	.350"	1.320" ⑤
R-4801A	700	2200	②	③ ④	③ ④	.025"	.350"	.350"	1.320" ⑤
R-4802A	700	2200	②	③ ④	③ ④	.025"	.350"	.350"	1.320" ⑤
R-4803A	700	2200	②	③ ④	③ ④	.025"	.350"	.350"	1.320" ⑤
R-6191A	900	1800	⑦	15/64" ⑨	17/64" ⑨	#53	#25	#18	2 - Rich
R-6193A	900	1800	⑦	15/64" ⑨	17/64" ⑨	# 53	#25	#18	2 - Rich
DIZF-VA	825	2100	⑦	④ ⑧	④ ⑧
DIZF-XA	650/500 ⑥	2400	⑦	④ ⑧	④ ⑧	3/32"	19/64"	.300"	2 - Rich
DIZF-YA	700	2200	⑦	④ ⑧	④ ⑧	3/32"	19/64"	.300"	2 - Rich

① - Or Ford Autolite No.

② - See Text.

③ - Float Level. Float centered in bowl, with bowl inverted.

④ - Wet Fuel Level. Fuel level with bottom of sight plug hole.

⑤ - Measured from bottom of throttle body to center of hole in choke lever.

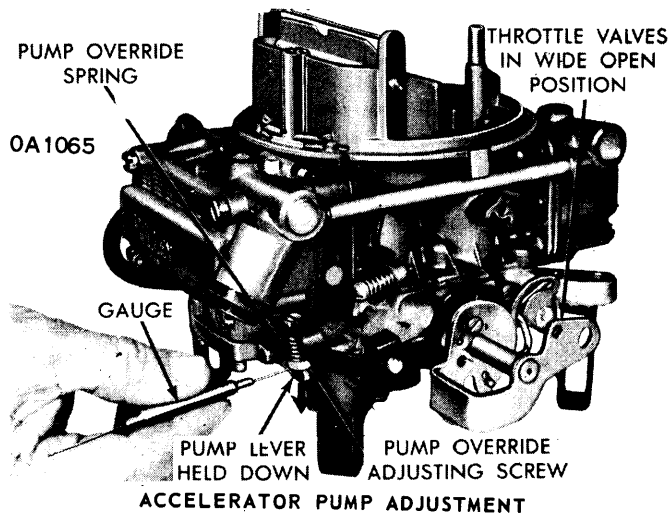
⑥ - Higher speed with solenoid energized, lower speed with solenoid de-energized.

⑦ - Limiter caps installed.

⑧ - Parallel with float bowl (bowl inverted).

⑨ - See text for wet fuel level.

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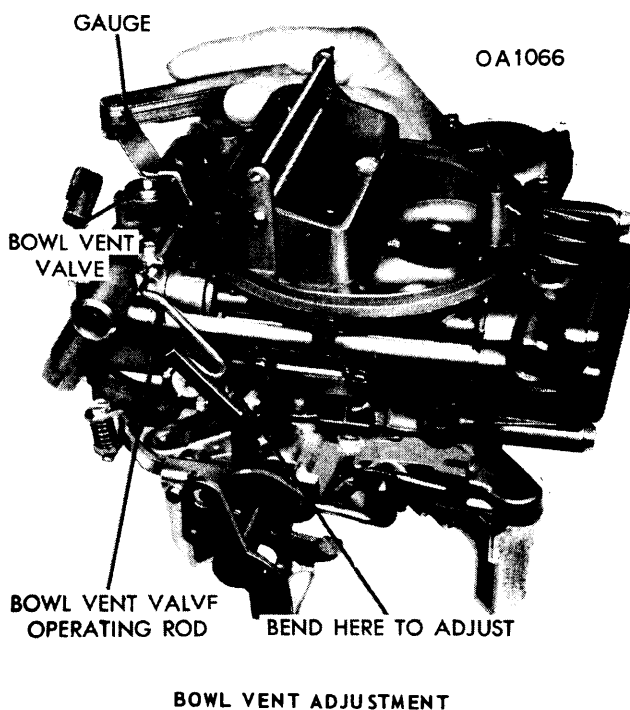
Pump Setting Adjustment – Two holes provided in throttle lever for pump cam screw engagement as follows:

Chevrolet – Install pump cam screw in No. 1 hole (all carburetors).

Ford Motor Co. – Install pump cam screw in No. 2 hole (all carburetors).

Bowl Vent Valve

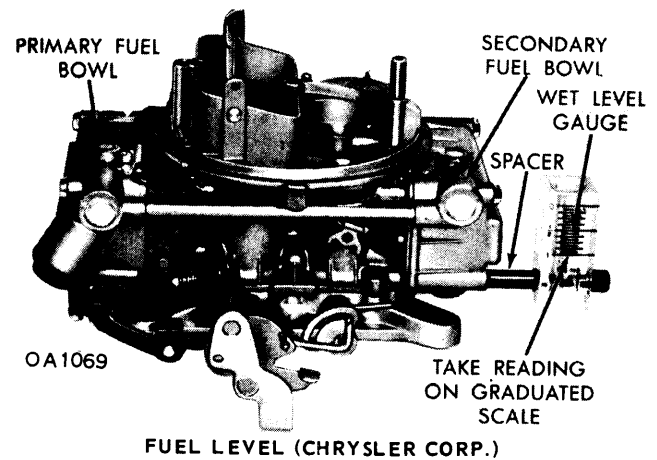
Chrysler Corp. – With idle speed correctly adjusted and throttle valves in curb idle position, there should be .015" clearance between bowl vent valve stem and actuating rod. If adjustment required, bend rod to change arc of contact with throttle lever.



Fuel Level

Chrysler Corp. ("Wet" Fuel Level) – Before checking fuel level, make certain that fuel pump pressure is 5 lbs. (**CAUTION** – Fuel level will vary $1/32"$ for each 1 lb. variation in pressure). Remove lower bolt from fuel bowl furthest from fuel inlet, install C-4051 Wet Fuel Level Gauge in this bolt hole. Start or crank engine to refill bowl (some fuel will be lost when gauge installed). Read fuel level on gauge which should be $9/16"$ (primary bowl), $13/16"$ (secondary bowl). If adjustment required, see "Float Level (On Bench)" for removal of float bowl and float adjustment.

All Other Carburetors – Bring engine to normal operating temperature, then remove air cleaner and stop engine. Remove sight plug in end of fuel bowl (use a container to catch fuel). Fuel level within bowl should be at lower edge of sight plug hole ($\pm 1/32"$). To adjust, proceed as directed below. **NOTE** – When checking secondary float level, first accelerate primary throttles slightly and operate secondary throttle by hand to stabilize secondary fuel level.



Fuel Level Too High – With engine stopped, loosen lock screw on top of fuel bowl just enough to allow rotation of nut underneath. **CAUTION** – Do not unlock lock screw or attempt to adjust fuel level with engine running. Turn adjusting screw $1/2$ turn clockwise to lower fuel level below specifications. Tighten lock screw, then run engine to stabilize fuel level. Check fuel level at sight plug hole. If level is not below specified level, repeat above step. With fuel level below specified level, turn adjusting nut in increments of $1/6$ turn until correct fuel level is obtained. **NOTE** – $1/6$ turn of adjusting nut will change fuel level at sight plug opening $3/64"$.

Fuel Level Too Low – Proceed as for "Fuel Level Too High" except that it will not be necessary to initially decrease fuel level below specifications.

Choke Control Lever Qualifying

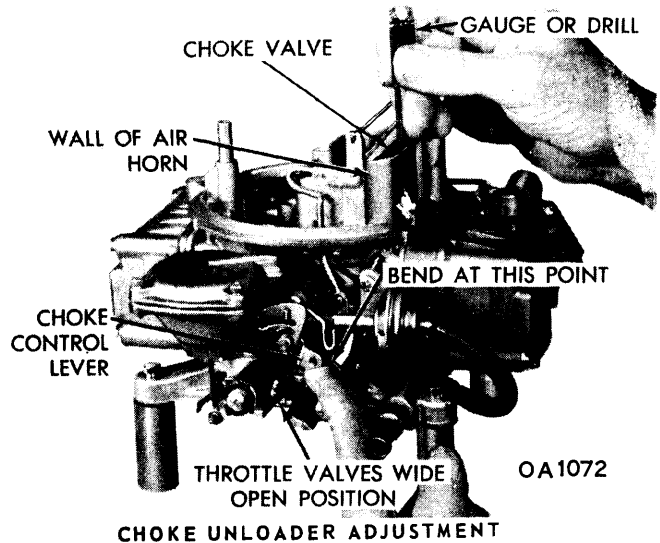
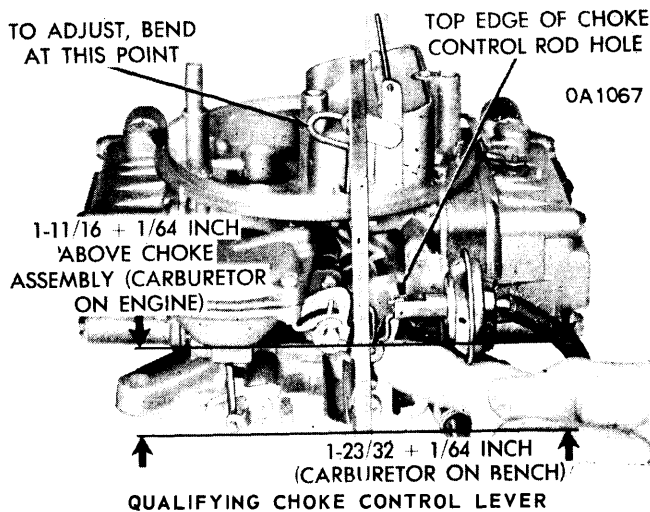
NOTE – On Chrysler, Imperial, Dodge & Plymouth, this adjustment must be made before checking or adjusting Fast Idle Cam Position, Unloader, or Vacuum Kick.

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Chrysler, Imperial, Dodge, Plymouth – Open throttle valves to mid-position, close choke valve by applying light pressure on choke control lever. Use scale to measure distance from top of choke rod hole in control lever to top of choke assembly (carburetor on engine) or to carburetor base (carburetor off engine). If this measurement not correct (see specifications below), adjust the bending connector rod at existing bend near choke lever. **CAUTION** – Check rod for free movement between open and closed positions after adjustment and rebend as necessary to relieve any binding.

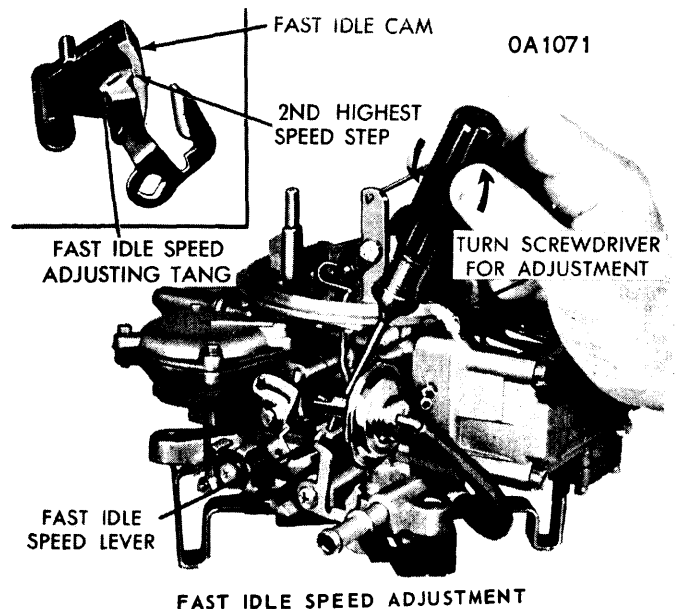
Choke Qualifying Setting

Carburetor on Engine	2 3/4"
Carburetor on Bench	1 17/32"



2) Insert #53 drill gauge between choke valve and air horn. Adjustment will be necessary if slight drag not obtained as drill is being removed.

3) Bend tang (see illustration) to obtain proper drag on drill gauge.



Unloader

Chrysler Corp. (All Carburetors) – With throttle valves in wide open position, insert correct size drill rod (see Specifications) between upper edge of choke valve and air horn wall, move choke valve toward closed position with light finger pressure on choke lever. Slight drag should be noted as drill rod removed. Adjust by bending unloader lever at undercut portion near throttle shaft.

All Other Carburetors – With throttle valves in wide open position, move choke valve toward closed position against unloader tang on throttle shaft, then measure clearance between lower edge of choke valve and air horn wall with a gauge or drill rod of correct size (see Specifications). If clearance not correct, adjust by bending choke rod at offset bend near choke valve lever (see illustration).

Fast Idle Cam Position

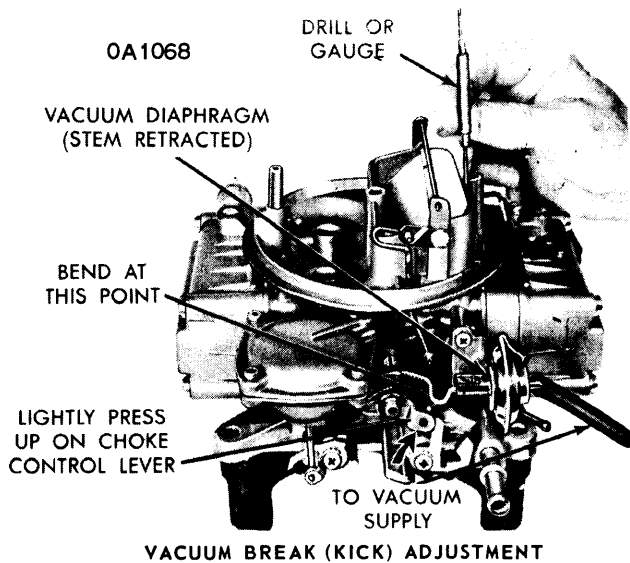
Chrysler Corp. – After qualifying choke control lever (if necessary) proceed as follows:

1) With fast idle speed adjusting tang contacting second highest speed step on fast idle cam, move choke toward closed position with light pressure on control lever.

Choke Plate Pull-Down

Ford Motor Co. (If Used) – Disconnect heat tube at thermodynamic choke cover, remove cover and coil assembly. Bend a .036" wire gauge at a 90° angle approximately 1/8" from end, insert bent end of gauge between piston slot and upper edge of right hand slot in choke housing, rotate choke lever counterclockwise until gauge held snugly in piston slot and maintain light pressure on choke lever to hold gauge in place. Use gauge or drill of correct size to check clearance between lower edge of choke valve and air horn wall. If clearance is not .300" ± .010" (all carburetors), adjust by bending adjusting arm on choke shaft lever up or down as necessary (see illustration).

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Vacuum Kick (Choke Vacuum Diaphragm)

Chrysler Corp. - *NOTE* - Auxiliary vacuum source (distributor tester or another vehicle) can be used to supply vacuum, or engine can be operated to supply vacuum of 10" of Hg. minimum for this test. If auxiliary vacuum source used, disconnect vacuum hose at carburetor fitting and connect vacuum line to this hose. (*CAUTION* - Disconnecting hose at diaphragm may damage system.)

Checking - With vacuum applied to diaphragm, insert drill rod of correct size (see Specifications) between choke valve and air horn wall, apply sufficient closing pressure on choke rod lever to provide minimum choke valve opening without distorting diaphragm link. (*CAUTION* - Diaphragm internal spring must be compressed which will be noted by extension of diaphragm stem). At this point, slight drag should be noted as drill withdrawn from choke valve. If choke valve position not correct, adjust diaphragm link length as necessary.

Adjustment - Change link length by opening or closing the link bend (*CAUTION* - Do not apply twisting or bending force to diaphragm).

Final Check - With no vacuum applied, choke valve must move freely between open and closed positions.

Vacuum Break

Chevrolet - With air cleaner removed, install rubber band on choke operating lever to hold in "closed choke" position. Depress choke diaphragm stem until bottomed. If clearance between lower edge of choke valve and air horn wall not as specified (see Specifications) bend choke diaphragm link as required.

Automatic Choke (Coil Rod)

Chevrolet - Hold choke valve open, pull coil rod down to end of travel. Bottom of rod end (which slides into hole in

choke lever) should be in line with notch. To adjust, bend choke coil rod at angle.

Chrysler Corp. - This unit is serviced as a complete assembly. Do not attempt to repair unit or change adjustment. See "Chrysler Automatic Choke".

Automatic Choke
(Integral Type)

Loosen choke cover screws and rotate cover and coil assembly to align reference mark on cover with correct graduation of scale on choke housing. See "Specifications".

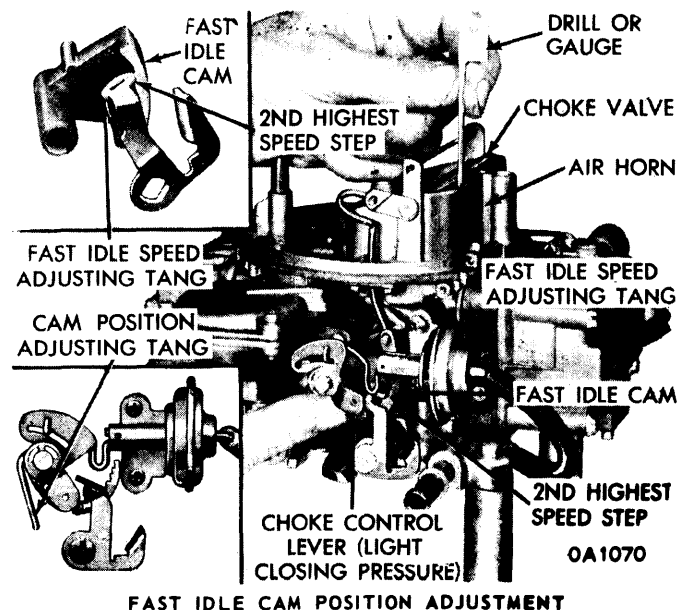
Dashpot

Ford Motor Co. - With engine at normal operating temperature, idle speed and mixture adjustments completed, loosen dashpot locknut. Hold throttle closed and depress dashpot plunger. Clearance between plunger and throttle lever should be 1/8" on 302" and 7/64" on 429" engines. Turn dashpot to adjust.

ADJUSTMENT (OFF ENGINE)

Fast Idle Cam Position

Chrysler Corp. (Carburetor on Bench) - With fast idle speed adjusting tang contacting second highest step on fast idle cam (see illustration), move choke valve toward closed position with light pressure on choke control lever. Measure choke valve opening by inserting drill rod of correct size (see Specifications) between valve edge and air horn wall. If slight drag not noted as drill withdrawn, adjust by bending fast idle speed tang parallel to cam contact surface. (*CAUTION* - Bending tang in any other manner will change Fast Idle Speed adjustment (see "On Engine" adjustments).



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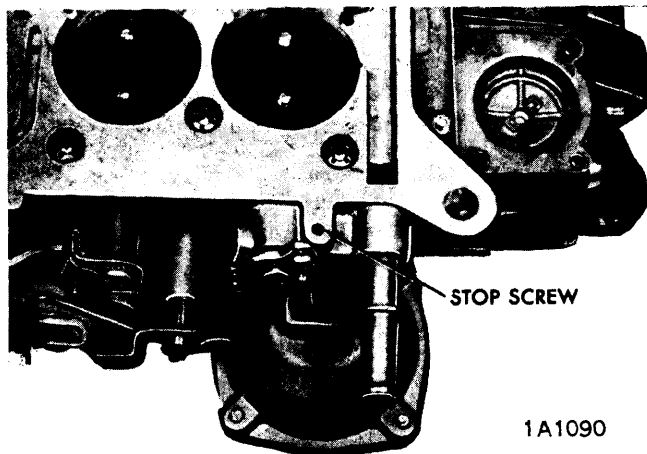
Fast Idle Cam

Chevy Nova, Chevelle, Camaro, Chevrolet & Corvette – Open throttle slightly and close choke valve fully to position fast idle lever on high step of fast idle cam, close throttle valves. Check throttle valve opening by inserting drill rod of correct size (see Specifications) between edge of throttle valve and carburetor wall on idle transfer slot side. Adjust by bending fast idle lever. Check fast idle speed after carburetor installed on engine.

Secondary Throttle Stopscrew (On Bench)

Chevrolet & Ford Motor Co. – Back off secondary throttle stopscrew (see illustration) until secondary throttle valves are tightly closed, turn stopscrew in until it just contacts the stop on the secondary throttle operating lever, then turn stopscrew in one-half additional turn.

Chrysler Corp. – No adjustment required. Secondary throttle valves are factory preadjusted.



SECONDARY THROTTLE STOPSCREW ADJUSTMENT

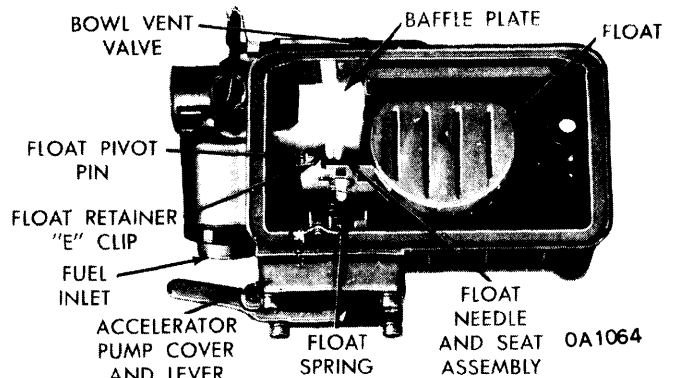
Float Level (On Bench)

NOTE – This is a preliminary adjustment only. After carburetor is installed on engine, Fuel Level must be checked and adjusted. See "Fuel Level" under ADJUSTMENT (ON ENGINE).

Disassembly

Before disassembly, loosen fuel inlet fitting, fuel bowl sight plugs, and needle and seat assembly lockscrews, then separate carburetor into main sub-assemblies as follows:

- 1) On carburetors with external interconnecting fuel line,



FUEL BOWL ASSEMBLY

Chevrolet – With fuel bowl inverted, adjust float until float surface is parallel with the surface directly below the float. On non-adjustable needle and seat assemblies, bend float adjustment tab. On adjustable type, turn adjusting nut.

Chrysler Corp. – Invert fuel bowl and float assembly with weight of float resting on seated intake needle, measure distance between toe of float and lower surface of fuel bowl (primary fuel bowl), heel of float and lower surface of fuel bowl (secondary fuel bowl). See Specifications. Adjust by bending float lever tang.

Ford Motor Co. – Invert fuel bowl and turn adjusting nut until center of float is equally distant from top and bottom of bowl.

Combined Emission Control Valve (C.E.C.) (Chevrolet Only)

NOTE – This adjustment should be made and is necessary only after: 1) replacement of solenoid, 2) major carburetor overhaul, or 3) removal and replacement of throttle body. After checking cam angle, ignition timing and curb idle speed, C.E.C. Valve is adjusted as follows:

- 1) Set the following conditions: Engine running at normal operating temperature, manual transmission Neutral, automatic transmission in Drive, vacuum hose removed and plugged at distributor, fuel tank hose from vapor canister disconnected, A/C OFF.
- 2) Manually extend the C.E.C. Valve plunger to contact the throttle lever and to the limit of its travel. Adjust plunger length to obtain 900 RPM with manual transmission in Neutral, or 750 RPM with automatic transmission in Drive.

OVERHAUL

disconnect line at primary and secondary fuel bowls. Remove primary fuel bowl screws and remove fuel bowl, primary metering body, splash shield and gaskets, and fuel tube (fuel bowl connector) if used.

- 2) Remove secondary fuel bowl screws, remove fuel bowl, secondary metering body and gasket (Model 4150). On Model 4160, remove secondary metering body screws and lift out metering body and gasket.

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3) Disconnect secondary throttle operating rod at throttle lever, then remove secondary throttle operating diaphragm assembly and gasket from main body. Disconnect vacuum hose at vacuum break or kick assembly, then remove diaphragm assembly (if used). Remove throttle body-to-main body screws, then remove throttle body and gasket from main body.

Fuel Bowls - 1) On carburetors with "end-hinged" floats, remove float hinge pin retainer, remove hinge pin and slide float from bowl. If necessary, remove spring from float assembly. Remove inlet baffle from bowl (if used). On carburetors with "side-hinged" floats, remove two float hinge screws, remove float assembly from bowl, slide hinge pin out, remove float and spring.

2) Remove fuel inlet needle and seat assembly. **NOTE - Do not disassemble fuel inlet needle and seat as they are matched assemblies.** Remove sight plug and gasket. Remove inlet fitting, fuel filter, spring, and gaskets.

3) On primary fuel bowls only, remove air vent valve assembly, then take out pump diaphragm cover assembly screws and remove pump cover, diaphragm, and spring from bowl. Check pump inlet ball for damage and make certain ball is free. Any damage to ball, passage, or retainer will require replacement of fuel bowl.

Metering Bodies - Use wide-bladed screwdriver to remove main metering jets, use 12-Pt. socket to remove power valve, remove vacuum fitting. On Model 4160 secondary metering bodies, remove plate and gasket from metering body dowel pins.

Chrysler Corp. - When removing idle mixture adjusting screws from primary metering body, first turn limiter caps against stops, pry caps off ends of screws, turn screws in until lightly seated and count number of turns required, note this number so that screws can be reinstalled in exact same position, then remove screws and gaskets.

Ford Motor Co. - Remove limiter caps from ends of idle mixture adjusting screws in primary metering body, then remove screws from body.

Secondary Throttle Operating Diaphragm Assembly - Take out screws and remove diaphragm cover, remove spring and diaphragm assembly from housing. Remove vacuum check ball from housing (when used).

Automatic Choke, Ford Only - 1) Remove choke rod retainer from shaft and lever assembly, remove choke and thermostatic coil assembly and gasket, then remove choke housing and gaskets from main body.

2) Remove choke housing shaft nut, lockwasher, and spacer, then remove shaft and fast idle cam. Remove choke piston and lever assembly from housing. Remove choke rod and seal from main body.

3) If necessary to remove choke valve, file staking on retaining screws (**CAUTION - Use care not to damage**

choke shaft or venturi while filing screws), remove screws and slide choke valve out, remove choke valve shaft.

Main Body - On carburetors with vacuum break, take out retaining screws and remove vacuum break diaphragm assembly. Take out accelerating pump nozzle screw, remove discharge nozzle and gaskets, invert main body and catch pump discharge needle which will fall out.

Throttle Body - 1) Remove accelerating pump operating lever, secondary throttle connecting rod, secondary throttle diaphragm lever, and fast idle cam lever. Remove throttle stopscrew and spring.

2) If necessary to remove primary or secondary throttle valves and shafts, lightly scribe all throttle valves along throttle shafts and mark each valve and corresponding bore to ensure correct reassembly, then file off staking on valve retaining screws (**CAUTION - Use care not to damage throttle shaft or venturi while filing screws**), take out screws and slide throttle valves out, slide throttle shafts out. Remove Teflon bushings from secondary throttle shaft.

Cleaning & Inspection

Clean metallic parts and castings with carburetor cleaner or solvent (if throttle body not disassembled, clean this assembly and all non-metallic parts in alcohol or gasoline). Blow out all passages with compressed air. Inspect all parts for wear or damage. All mating surfaces must be smooth and not burred or gouged. Inspect needle and seat for burrs, ridges, or wear, and replace both parts as an assembly.

Reassembly

Use all new gaskets. Reverse disassembly procedure and note the following:

Throttle Valve Installation - Assemble valves on shafts in accordance with marks made at disassembly, install but do not tighten retaining screws. Center valves by tapping lightly while holding valves closed (little or no light should show between edges of valves and carburetor bore), then tighten retaining screws securely and stake the screws (**CAUTION - Support shaft on soft metal bar to prevent bending shaft during staking operation**). **NOTE - Roll new plastic throttle shaft bushings between thumb and first finger to shape on shaft for easier installation.**

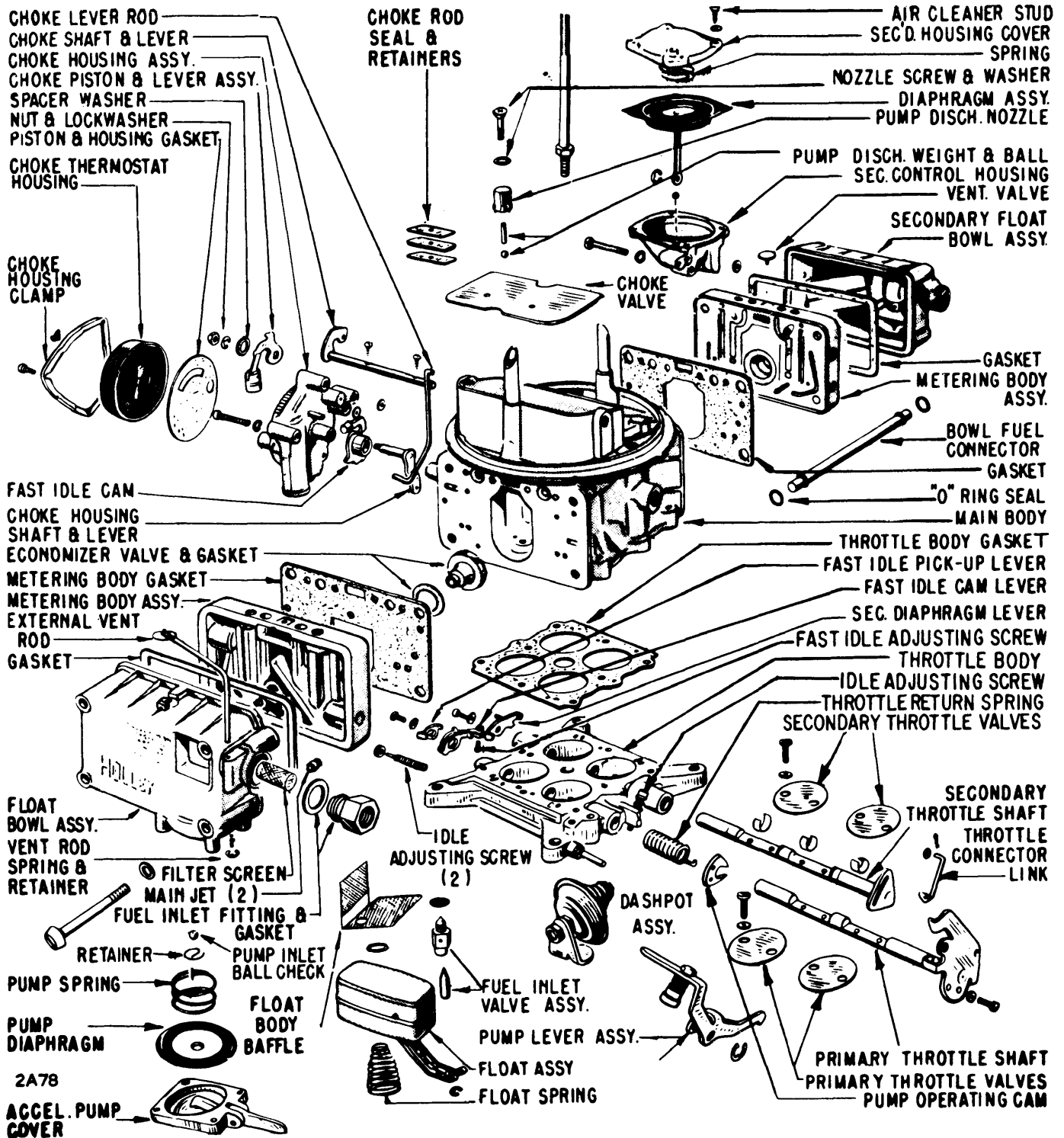
Accelerating Pump Discharge Needle Seat - If seat is rough, use an old discharge needle and tap needle lightly using a small brass rod and fibre mallet. Install new discharge needle and make sure it is free in passage.

Secondary Diaphragm Housing Assembly - Install vacuum check ball in housing (when used), install the diaphragm and position the spring on diaphragm (small end on boss on cover), tighten cover screws just snug, then pull diaphragm rod downward as far as possible while tightening cover screws securely. Install assembly on carburetor main body.

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Idle Mixture Adjusting Screw Installation (Chrysler Corp.) – Install screws and gaskets in primary metering body and turn screws in until lightly seated, then back out each screw exact number of turns noted during disassembly, install new limiter cap on each screw with tabs against stop in metering body.

Idle Mixture Adjusting Screw Installation (Ford Motor Co.) – Install adjusting screws in primary metering body, turn each screw in until lightly seated, then back screw out 1½ turns for initial idle fuel adjustment. Do not install limiter caps until after carburetor installed on engine and air/fuel ratio set to specifications.



HOLLEY 4-BARREL 4150 CARBURETOR ASSEMBLY (4160 SIMILAR)