MOTORCRAFT MODEL 5200 2-BARREL

Capri 2000 cc 4 Cyl. (1971-73)
Capri 2600 cc 6 Cyl. (1972-73)

▶ CHANGES, CAUTIONS, CORRECTIONS

▶ *SECONDARY CHOKE PLATE REVISION* — The 1973 Capri, equipped with the 2000 cc engine and automatic transmission does not have a choke plate in the secondary air horn. The deletion of this choke plate is by design. Note this information when obtaining replacement carburetor.

DESCRIPTION

The Motorcraft model 5200 carburetor is a downdraft, two stage, two venturi type with the primary venturi smaller than secondary. Primary stage includes curb idle, accelerator pump, idle transfer, main metering and power enrichment systems. Secondary stage is actuated by mechanical linkage and includes transfer, main metering and power systems. A single fuel bowl supplies fuel to both primary and secondary systems. A hot idle compensator, mounted in carburetor spacer plate, increases idle RPM when engine is warm and idling. A water-heated automatic choke, with integral diaphragm-type choke plate pulldown, is mounted on carburetor main body.

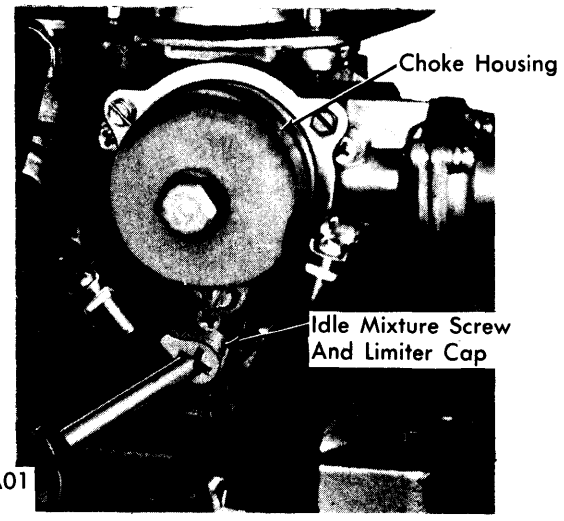
ADJUSTMENT

IDLE SPEED & MIXTURE

All carburetors are equipped with limiter caps installed on idle mixture screws. These caps control maximum idle richness and prevent a rich idle condition. Any adjustments to idle mixture screw must be done within the range of the limiter cap.

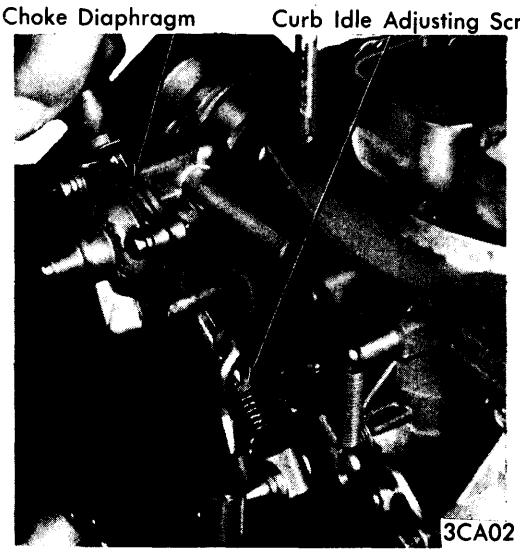
1) Engine and underhood area temperatures must be stabilized before making any adjustments. Run engine at 1500 RPM for approximately 20 minutes. This can be accomplished by positioning fast idle screw or cam follower on kickdown step of fast idle cam.

2) When engine has been sufficiently warmed up, kick throttle down to original position. Check timing and, if necessary, adjust to specification. Disconnect hose from carburetor to decel valve at valve. Plug line to carburetor.



IDLE MIXTURE ADJUSTING SCREW & LIMITER CAP

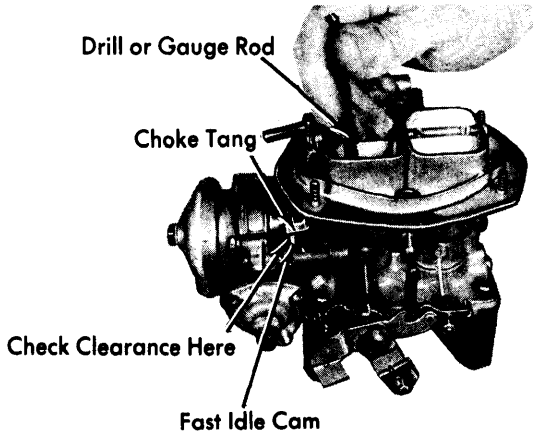
3) Place manual transmission vehicles in neutral and automatic transmission vehicles in "D". Adjust curb idle adjusting screw to idle RPM specified on Engine Compartment Emission Control Tune-Up Decal. Now turn idle mixture adjusting screw to obtain smoothest possible idle within the range of limiter cap.



CURB IDLE ADJUSTING SCREW

FAST IDLE CAM CLEARANCE

Insert a 5/32" drill between lower edge of choke plate and air horn wall. Place fast idle adjusting screw on second step of fast idle cam. Measure clearance between tang of choke lever and arm on fast idle cam. If clearance is not within specifications (see table), bend choke lever tang as required.



FAST IDLE CAM CLEARANCE

CHOKE PLATE PULLDOWN

1) Remove three hex-head screws and ring retaining the choke thermostatic spring cover. *NOTE — Do not remove the water cover screw.* Pull water cover and thermostatic spring cover assembly out of way. Set fast idle cam on top step.

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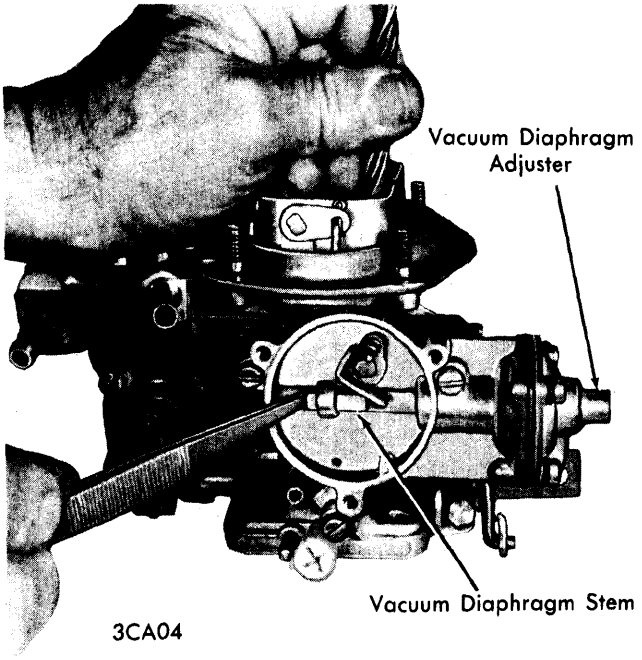
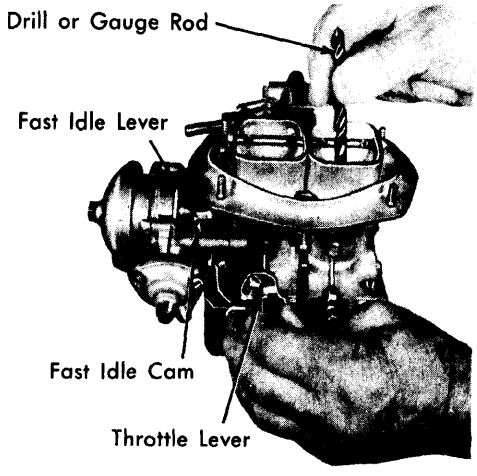
2) Using screwdriver, push diaphragm stem back against its stop. Place a specified gauge rod or drill between lower edge of choke plate and air horn wall. Remove slack from choke linkage by applying pressure to top edge of choke plate. To adjust choke plate-to-air horn clearance, remove plug from diaphragm and turn adjusting screw in or out as required.



MEASURING CHOKE PLATE PULLDOWN

DE-CHOKE CLEARANCE

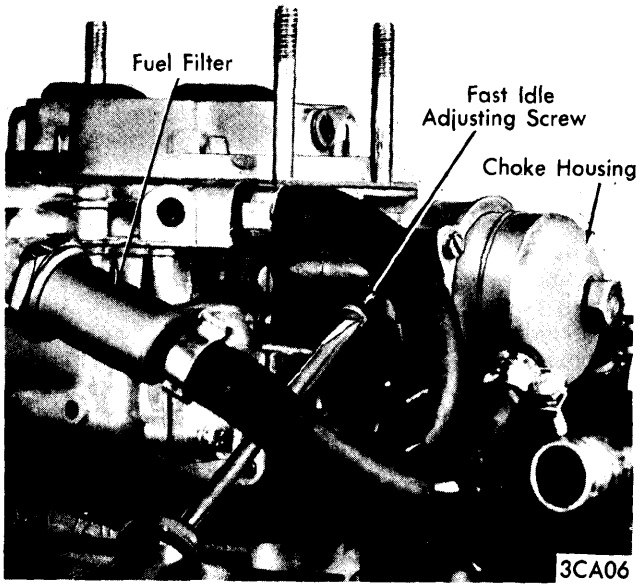
Hold throttle lever in wide open position. Take slack out of choke linkage by applying pressure to top edge of choke plate. Measure clearance between lower edge of choke plate and air horn wall. Adjustments are made by bending tab on fast idle lever where it touches the fast idle cam.



ADJUSTING DE-CHOKE

FAST IDLE SPEED

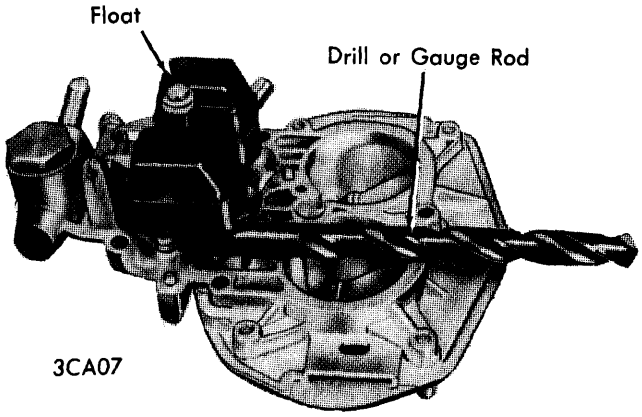
With engine at normal operating temperature and fast idle screw on second step of fast idle cam (and against shoulder of first step), adjust fast idle speed to specification by turning adjusting screw (see illustration).



FAST IDLE ADJUSTMENT

DRY FLOAT SETTING

With bowl cover held in an inverted position and float tang resting lightly on the spring-loaded needle, measure clearance between edge of float and bowl cover. To adjust clearance, bend float tang up or down as necessary. Adjust both floats equally. *CAUTION — Do not scratch or damage tang.*



DRY FLOAT SETTING

FLOAT BUMPER SPRING

With bowl held in inverted position, measure clearance between float bumper spring and float drop tang. If clearance is not with specifications, bend tang until proper clearance is obtained.

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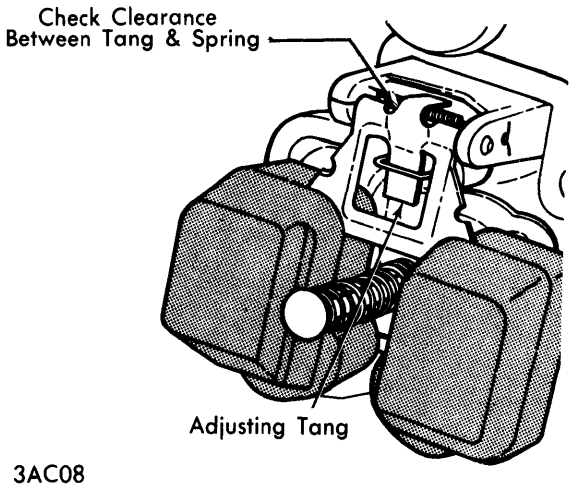
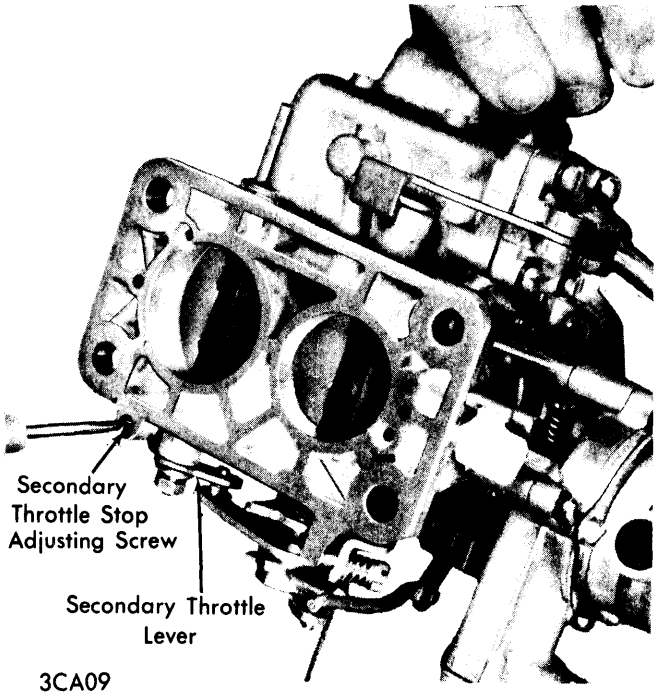


FLOAT BUMPER SPRING ADJUSTMENT

SECONDARY THROTTLE STOP SCREW

Back off secondary throttle stop screw until secondary throttle plate seats in bore. Turn screw in until it touches tab on secondary throttle lever; then turn in an additional ¼ turn.



SECONDARY THROTTLE STOP ADJUSTMENT

CHOKE THERMOSTATIC SPRING HOUSING

Remove air cleaner. Loosen three choke cover retaining screws. Cover can be rotated slightly without removing water cover. Set choke cover to ⅛" lean mark. A small prick punch mark will indicate proper location. Tighten cover retaining screws. Install air cleaner.

OVERHAUL

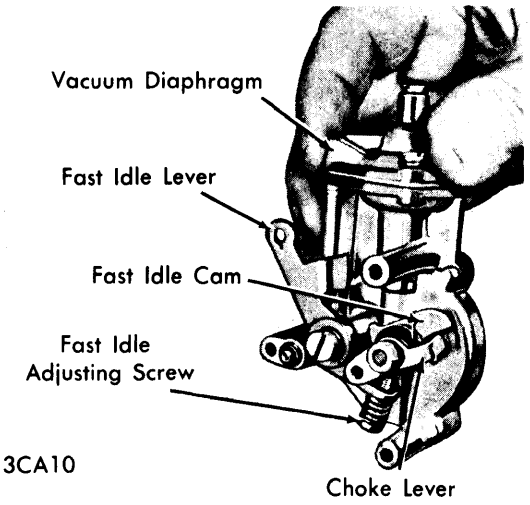
DISASSEMBLY

Bowl Cover – Remove fuel inlet filter plug and filter screen assembly. Remove bowl cover screws and lock washer. Remove retainer clips from choke rod and carefully remove bowl cover. Remove choke rod seal plug and seal. Remove float shaft, float, and inlet needle. Remove three vacuum diaphragm screws, washers, and diaphragm.

Automatic Choke – 1) Remove choke water cover and gasket. Detach choke thermostatic spring housing retaining ring; then remove housing and gasket. Remove three choke housing assembly screws. Slip housing away from main body and disengage fast idle rod. *NOTE – Mark location of long screw.*

2) Remove "O" ring from vacuum passage. Unscrew choke shaft nut and remove lock washer. *NOTE – Mark position of fast idle cam spring.* Remove spring loop from choke lever; then remove spring and lever. Remove choke shaft washer, choke shaft, lever, and Teflon bearing.

3) Remove fast idle lever and shaft retaining screw, bushing, and spring washer. Remove fast idle lever and flat spacer. Remove adjusting screw and spring. Detach choke diaphragm cover assembly. Remove return spring, diaphragm, and rod assembly. Remove diaphragm plug and diaphragm adjusting screw from the cover.



REMOVING AUTOMATIC CHOKE

Accelerator Pump – Remove four pump cover screws and pump cover assembly. Remove pump diaphragm assembly and pump return spring. Withdraw pump discharge valve assembly and pump discharge nozzle and two gaskets. Remove pump channel plug screw.

Main Body – 1) Remove primary main well air bleed plug and main well tube. Remove secondary main well air bleed plug and main well tube. Note location and size of air bleed plugs and main well tubes for reinstallation in original positions.

2) Remove primary and secondary main metering jets. Note location of different size jets for proper reinstallation. Remove power valve and gasket. Remove primary and secondary idle jet retainer plugs and idle jets, located on sides of carburetor body (see illustration).

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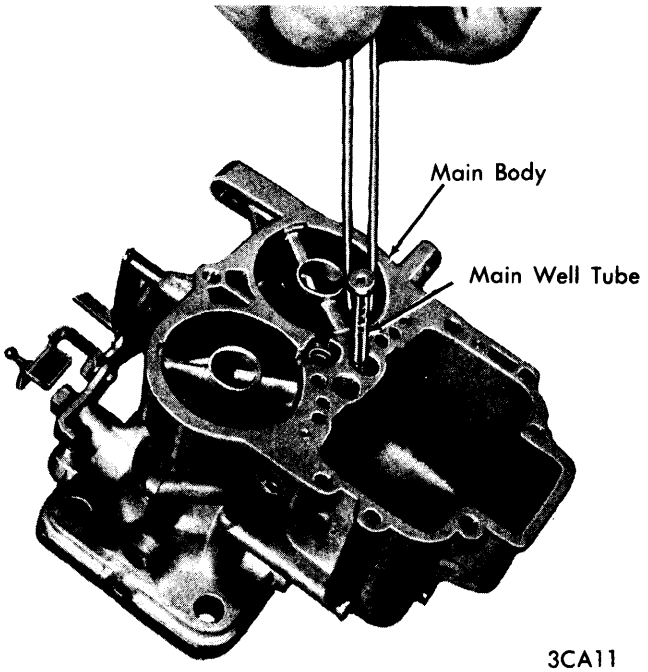
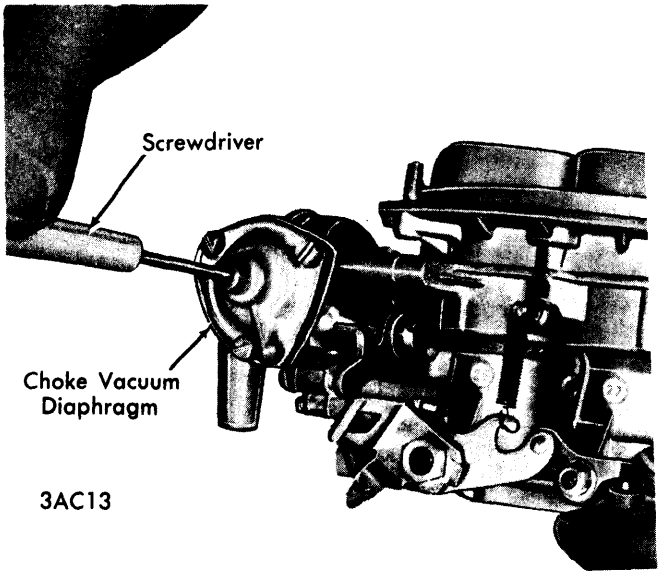


REMOVING MAIN WELL TUBES

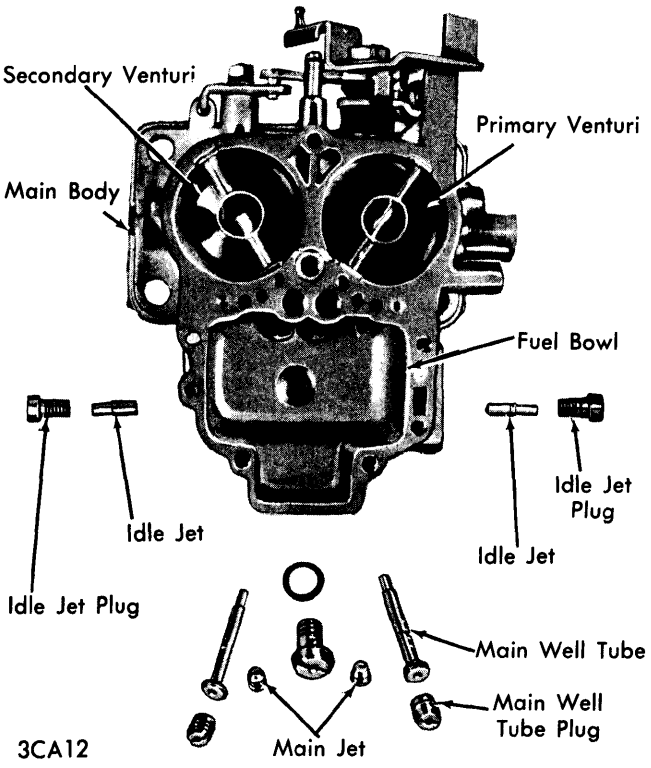
3) Turn idle limiter cap in to the stop. Remove idle limiter cap. Count turns required to lightly seat idle adjustment needle (count to the nearest $\frac{1}{16}$ turn). Remove idle needle and spring. Remove secondary operating lever return spring.

4) Remvove primary throttle lever nut, lock washer, primary lever and flat washer. Remove secondary lever assembly and lever bushing. Remove idle adjusting lever spring and shaft washer. Note how primary throttle return spring is hooked over idle adjusting lever and carburetor body.

5) Remove idle speed screw and spring from idle adjusting lever. Remove secondary throttle lever nut, lock washer, flat washer and secondary throttle lever. Remove secondary idle adjusting screw.



ADJUSTING AUTOMATIC CHOKE DIAPHRAGM



MAIN METERING JETS & IDLE JETS

ASSEMBLY

Main Body – 1) Install secondary idle adjusting screw, secondary throttle lever, flat washer, lock washer, and nut. Install idle speed screw and spring in idle adjusting lever. Install idle speed screw and spring in idle adjusting lever. Install washer, primary throttle return spring and idle adjusting lever, and lever bushing. Install secondary operating lever assembly.

2) Install flat washer and primary throttle lever. Install lock washer and nut. Attach secondary lever return spring. Install idle mixture adjusting needle and spring. Turn it in until it lightly bottoms. Back out screw the **exact** number of turns recorded at disassembly. Install a new limiter cap on idle mixture needle with stop tab on cap against lean side of stop on carburetor body.

3) Install idle jets and plugs on each side of carburetor body. Check carefully for correct primary and secondary sizes. Install power valve gasket and power valve. Install primary main jets, insuring correct sizes and installed. Install primary and secon dary main well tubes and plugs, insuring correct sizes are installed.

Accelerator Pump Assembly – Install pump channel plug screw. Install pump discharge nozzle with gasket on top and bottom. Install pump discharge valve assembly. Install pump return spring and pump diaphragm assembly. Start four pump cover screws. Hold pump operating lever partially open to align diaphragm gasket. Tighten four cover screws evenly.

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Automatic Choke – 1) Install diaphragm adjusting screw. Initially adjust screw so that threads are flush with inside of cover. Install adjusting screw plug. Install choke diaphragm and rod assembly. Install diaphragm return spring and cover. Install three cover screws and lock washers.

2) Install fast idle adjusting screw and spring. Install fast idle flat spacer, fast idle adjusting lever, spring washer, bushing, screw, and lock washer. Install Teflon bushing at thread end of choke housing shaft and start shaft into bore. Install shaft carefully into bore, to avoid damaging Teflon bushing.

3) Install choke shaft washer, spring retainer fast idle cam spring, and choke lever. Position spring loop over arm of choke lever, in original position. Install lock washer and nut. Install "O" ring on vacuum passage, bent end of fast idle rod in fast idle adjusting lever, and other end of fast idle rod in primary throttle operating lever.

4) Install three choke housing screws, noting position of long screw. Install thermostatic housing with gasket. Position housing at Index. Install housing retaining ring and three screws. Install choke water housing gasket and screw.

EARLY MODELS

CARBURETOR ADJUSTMENT SPECIFICATIONS

Ford Part Number	Idle Speed (Engine RPM)		Fast Idle Cam② Setting	Accel. Pump Setting	Float Level③ Setting	Choke Pull-Down Setting	Unloader Setting	Auto. Choke Setting
	Hot①	Fast						
D1RY-L	650	1800	.156"	Lower Hole #3	.420"	.236"	.256"	1 Lean
D1RY-K	750	1600	.079"	Center Hole #2	.420"	.236"	.256"	1 Lean
D2RY-E	650/500	1800	.156"	Lower Hole #3	.420"	.236"	.256"	④ 1 Lean
D2RY-D	750/500	1600	.079"	Center Hole #2	.420"	.236"	.256"	1 Lean
D2RY-B	650	1800	.156"	Lower Hole #3	.420"	.236"	.256"	Index
D2RY-A	750	1600	.118"	Center Hole #2	.420"	.236"	.256"	1 Lean

① – High RPM is adjusted with solenoid adjusting nut and Auto. Trans. in "D". Low RPM is adjusted with curb idle screw and transmission in Neutral.

② – ±.020".

③ – Dry setting±1/32".

④ – Calif., index.

LATE MODELS

CARBURETOR ADJUSTMENT SPECIFICATIONS

Ford Carb. Number	Idle Speed (Engine RPM)		Fast Idle Cam③ Setting	Accel. Pump Setting	Float Level② Setting	Choke Pull-Down Setting ④	Unloader Setting	Auto. Choke Setting
	Hot①	Fast						
73TF-AA	.....	1600	.118"	Hole #2	.042"	.237" ③	.256"	1 Lean
73TF-BA	.....	1800	.118"	Hole #2	.042"	.237" ③	.256"	Index
D32F-CA	.....	1800	.158"	Hole #2	.042"	.158" ③	.256"	Index
D32F-BD	....	1600	.118"	Hole #2	.042"	.158" ③	.256"	1 Lean

① – See engine compartment tune-up decal.
② – ± .040".
③ – ± .020".
④ – Minimum.

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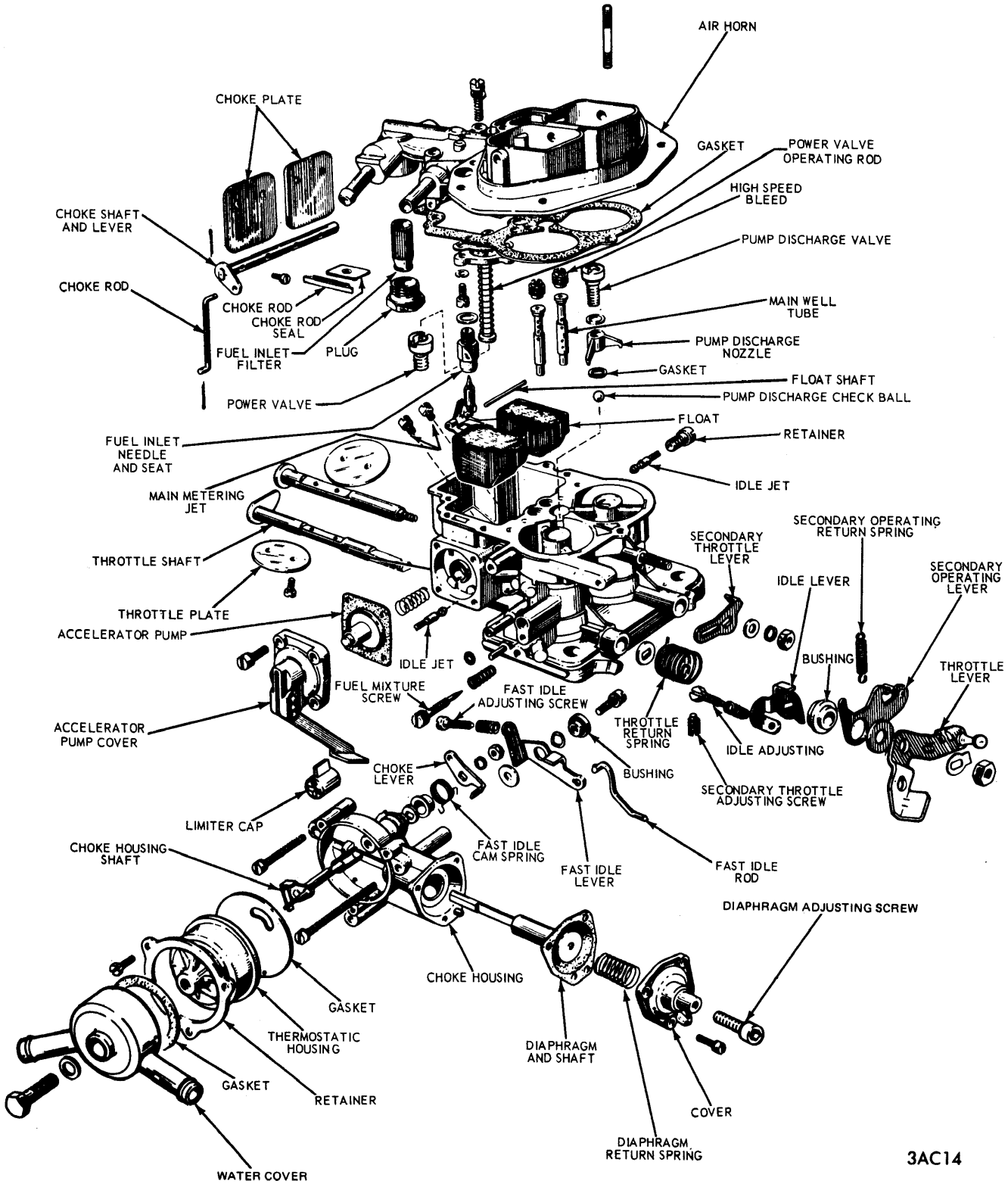

MODEL 5200 CARBURETOR – DISASSEMBLED