1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200

1968 FORD MODEL 2100

U.S. Thermactor & IMCO Engines

	Ford Carburetor No.	
COMET & MONTEGO	**Synchro-mesh**	**Auto. Trans.**
302" V8	C8AF-AK	C80F-H, C8ZF-G
390" V8 (Reg. Fuel)	C8AF-M, AM	C80F-U
		C80F-J
(Prem. Fuel)		C80F-K
COUGAR		
302" V8	C8AF-AK	C80F-H, C8ZF-G
390" V8 (Reg. Fuel)	C80F-J	C80F-U
(Prem. Fuel)		C80F-K
FALCON & MUSTANG		
289" V8	C8AF-AK	C8ZF-G
FAIRLANE		
289" V8	C8AF-AK	C8ZF-G
302" V8	C8AF-AK	C80F-H, C8ZF-G
390" V8 (Reg. Fuel)	C8AF-M, AM	C80F-U, AF
		C80F-J C8AF-BA
(Prem. Fuel)		C80F-K, C8WF-A
FORD		
302" V8	C8AF-AK	C8AF-L
390" V8 (Reg. Fuel)	C8AF-M, AM	C8AF-AN, BA
		C80F-AF
(Prem. Fuel)		C8AF-N, C8WF-A
MERCURY		
390" V8 (Reg. Fuel)	C8AF-M, AM	C8AF-AN
(Prem. Fuel)		C8AF-N

Export Non-Emission Engines

	Ford Carburetor No.	
COMET & MONTEGO	**Synchro-mesh**	**Auto. Trans.**
302" V8	C8AF-AF	C80F-S
COUGAR		
302" V8	C8AF-AF	C80F-S
FALCON & MUSTANG		
289" V8	C8AF-AF	C80F-S
FAIRLANE		
289" V8	C8AF-AF	C80F-S
390" V8	C8AF-AH	C80F-T

1968 FORD MODEL 6200

	American Motors Code No.	
RAMBLER AMERICAN, REBEL, JAVELIN & AMBASSADOR	**Synchro-mesh**	**Auto. Trans.**
290" 200HP V8	① 8HM2	② 8HA2
343" 235HP V8		③ 8ZA2

① - Part.No. C8FF-9510-A. ② - Part No. C8FF-9510-B.
③ - Part No. C8FF-9510-C.

1969 FORD MODEL 2100

	① Ford Carburetor No.	
FALCON	**Synchro-mesh**	**Auto. Trans.**
302" V8	C8AF-BD	C9ZF-G
FAIRLANE & MONTEGO		
302" V8	C8AF-BD	C9ZF-G
351" V8	C9ZF-A	C90F-C
MUSTANG & COUGAR		
302" V8 (Mustang)	C8AF-BD	C9AF-A
351" V8	C9ZF-A	C9ZF-B
390" V8	C9AF-B	C9AF-C
MERCURY		
390" V8 (Reg. Fuel)	C9AF-B	C9AF-C
(Prem. Fuel)		C9MF-A
429" V8		C9AF-J
THUNDERBIRD		
428" V8		C9AF-J

1969 FORD MODEL 6200

	① American Motors Code No.	
RAMBLER, REBEL, JAVELIN & AMBASSADOR	**Synchro-mesh**	**Auto. Trans.**
290" V8	9HM2	9HA2
343" V8		9ZA2

① - Ford Carburetor number prefix and suffix with basic part number (9510) omitted.

►CHANGES, CAUTIONS, CORRECTIONS

►*FORD MOTOR CO. THERMACTOR & IMCO ENGINES NOTE:* These engines have specially calibrated carburetors and distributors with related control units and closed positive crankcase ventilation system for exhause emission control. **Thermactor Engines** - Have air pump for air injection in engine at exhaust valve ports.

►*AMERICAN MOTORS AIR GUARD AND ENGINE MOD. ENGINES NOTE:* These engines have emission calibrated carburetors and distributors, closed-positive crankcase ventilation system, and thermostatically controlled air cleaner (except Air Guard engines) for exhaust emission control. **Air Guard Engines** - Have air pump for air injection in engine at exhaust valve ports.

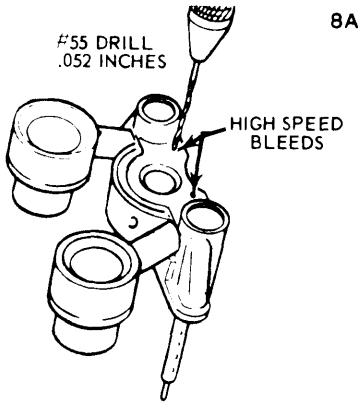
►*1968 FORD MOTOR CO. 289" & 302" V8 ENGINES HESITATION OR STUMBLE ON LIGHT ACCELERATION CORRECTION (Ford 2-Bbl. C8ZF-G & C8AF-L Carbs. with Code Letter "A"):* May be caused by a lean air-fuel mixture during transition from idle circuit to main fuel circuit. If condition persists after checking ignition timing, wet fuel level, and proper routing of vacuum lines, correct as follows: Remove carburetor air horn and booster support assembly, use #55 drill in a pin vise to enlarge high speed bleeds to .052" (see illustration for locations). Rotate drill slowly through existing hole to prevent drill chips entering booster assembly and clean assembly thoroughly before reassembling carburetor. Set wet fuel level very accurately to 3/4", set ignition timing and check routing of vacuum lines when carburetor installed on engine and change the following:

Automatic Choke - Change setting from 1 notch lean to 1 notch rich.

Accelerating Pump Setting - Change setting from No. 2 hole to No. 3 hole. *NOTE - Carburetors with code letter "B" (first letter of second line on tag) have been modified in production and do not require correction.*

►*1968 FORD MOTOR CO. 302" & 390" V8 ENGINES INADEQUATE CARBURETOR RETURN SPRING TENSION CAUSING HIGH IDLE SPEED CORRECTIONS (Fairlanes before Dec. 1, 1967 & Montegos before Nov. 1, 1967):* Install new part No. C5ZZ-9737-B2 throttle return spring (identified by Black color) to replace original Siler spring.

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)



CARBURETOR HIGH SPEED BLEED DRILLING (HESITATION OR STUMBLE CORRECTION)

►*1968 AMERICAN MOTORS 290" & 343" V8 ENGINES TIP-IN STUMBLE ON FAST ACCELERATION FROM A COMPLETE STOP CORRECTION:* Reposition accelerator pump operating rod in No. 2 hole (shorter stroke) of throttle over-travel lever. *NOTE - Holes in over-travel lever are numbered 1 to 4, No. 1 being closest to throttle shaft.* If further correction needed, place accelerator pump operating rod in No. 1 hole of over-travel lever. Under extreme cold operating conditions, the pump operating rod may be moved up as necessary for increased pump discharge.

►*1968 AMERICAN MOTORS 290" & 343" V8 ENGINES HARD STARTING DUE TO PERCOLATION CORRECTION:* This condition caused by residual pressure in fuel line between fuel pump and carburetor and heat transfer from intake manifold to carburetor. Various corrective procedures have been made in production or have recently been recommended to be made in the field as outlined below. Additional changes (Kits No. 4485996 or 4485997) are now recommended to be made in the field as outlined below.

290" & 343" V8 Engines prior to Build Code Nos. 912 (H or Z) 04. *NOTE - Kit No. 4485787 (Fuel pump parts and carburetor mounting gasket) has been superseded by Kit No. 4485996 (with additional carburetor parts).* If fuel pumps not previously modified (reworked carburetors identified by daub of yellow paint on fuel pump body), use Kit No. 4485996 and proceed as follows:

1) Disconnect fuel inlet and outlet lines, remove fuel fittings from pump, separate and remove fuel fittings from pump, separate and remove fuel section from pump body (do not remove pump).

2) Remove and discard check valve housing from filter assembly, install new check valve housing using original gasket.

3) Reassemble fuel pump using care not to damage fuel pump diaphragm, install fittings and connect fuel lines. Check for external leaks after engine started.

4) Mark fuel pump with daub of yellow paint on top of fuel pump body to indicate that modifications have been made.

5) Make all carburetor modifications as indicated for later engines below (as detailed for Kit No. 4485997 which contains same carburetor parts).

290" & 343" V8 Engines between Build Code Nos. 912 (H & Z) 04 and Build Code No. 103H12 (290" V8 - 343" V8 cutoff number not available). *NOTE - These engines have modified fuel pump identified by daub of yellow paint on fuel pump body or by revised part number stamped on pump body as follows:* #4336SA or #4182SC. Use Kit No. 4485997 and proceed as follows:

1) Remove carburetor, adapter, and gaskets from intake manifold. Re-install adapter with new 3/16" thick gasket on manifold, tighten bolts to 15 ft. lbs. torque.

2) Refer to OVERHAUL data for carburetor disassembly, remove air horn assembly, drain fuel bowl, remove float and attaching parts, remove fuel inlet needle seat, gasket, and filter screen, discard inlet needle seat and screen.

3) Install new inlet needle seat using original gasket. Install new baffle screen in fuel bowl with narrow cutout slot toward bottom of bowl and retaining tabs facing needle seat, press baffle firmly against bottom of bowl.

4) Install new square inlet needle and retaining clip on new brass float assembly, reinstall float in bowl using original float shaft and shaft retainer.

5) Seat float inlet needle by raising float lightly, measure float level or distance from machined surface of fuel bowl to float seam at point 1/8" from free end of float. This distance should be ½". Adjust by bending float tab as required.

6) Position air horn and new gasket on carburetor main body (do not install retaining screws), install carburetor on engine using new gasket, tighten mounting nuts to 15 ft. lbs. torque.

7) Start engine and allow it to idle for at least 3 minutes to stabilize fuel level. With engine id'ling, remove air horn assembly and check fuel level by measuring from machined edge of fuel bowl to surface of fuel. This distance should be 13/16". If adjustment required, shut down engine, change float level by bending float tab and recheck fuel level (repeat stabilizing procedure).

8) Install air horn by tightening all screws evenly and securely. Position nylon dust shield on choke rod and install air cleaner. Mark carburetor with daub of yellow paint on casting boss on upper left side of fuel bowl to indicate that modifications have been made.

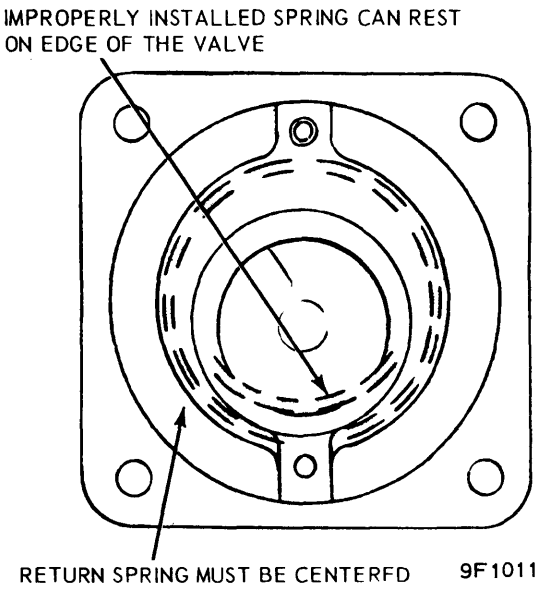
9) Check ignition timing and set at TDC ±1° (+ 1° desired).

►*SLIGHT HESITATION UPON ACCELERATION CORRECTION (302", 351", 390", 429" V8 Engines with 2-Barrel Carbs. & Automatic Transmission):* To correct this complaint, check all Tune-up settings, check and correct any vacuum leaks at vacuum fittings or connections. If condition not corrected, make carburetor changes as follows:

Accelerating Pump Return Spring – Remove accelerating pump assembly and examine fit of return spring large end in pump recess. Spring O.D. should pilot in spring recess. If spring O.D. is undersize and does not pilot in groove, reform large end of spring or replace it. If spring end was mispositioned, resulting in deformation of pump elastomer valve, replace valve.

Accelerating Pump Elastomer Valve – On carburetors built prior to December 4, 1968 (8M 4 on lower line of carburetor tag), if valve marked by small letter "V" (Vernay valve), replace valve with type not marked by V (Moxness valve). To replace valve, remove float assembly from carburetor and pull out old valve. Lubricate stem of new valve and insert stem through pump cavity center hole. Use needle nose pliers inserted in fuel to grasp valve stem and pull valve in until it seats in pump cavity wall. Cut off stem forward of retaining shoulder and remove this portion of stem from bowl. When reassembling pump, make certain return spring is properly positioned and clears valve.

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)



ACCELERATING PUMP RETURN SPRING INSTALLATION

Accelerating Pump Discharge Nozzles – Remove booster venturi support and check pump discharge nozzles for dirt and proper size by running drill of specified size through nozzle, blow out all metal chips and dirt that might restrict fuel flow. *CAUTION – Do not use drill of any larger size than specified below.*

Engine & Trans.	Pump Nozzle Drill Size
302" V8 Auto. Trans.	.024"
351" V8 Auto. Trans.	.0292"
390" & 429" V8 Auto. Trans.	.031"

Wet Fuel Level – Check fuel level (see Adjustments) and set fuel level to following specifications:

Engine & Carb.	Wet Fuel Level
302" V8 2-Barrel	3/4"
351", 390", 429" V8 2-Barrel	13/16"

High Speed Bleeds (429" V8 C9AF-J Carb. only) – With booster venturi assembly removed from carburetor, use a #56 (.0465") drill in a pin vise and drill through high speed bleeds as shown in illustration by turning drill slowly by hand. Blow out passages to remove all drill chips before reassembling carburetor. *CAUTION – Do not use drill of any other size to drill out these high speed bleeders.*

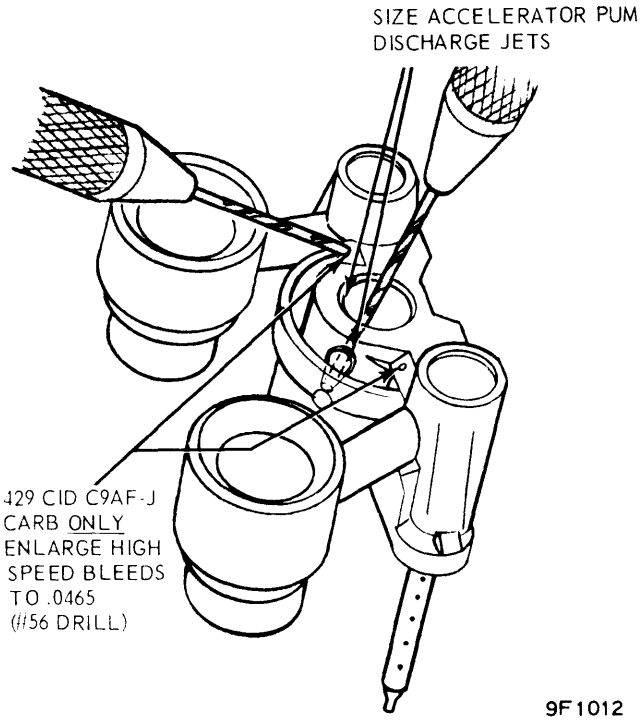
CARBURETOR IDENTIFICATION

Ford Motor Co. - Carburetor number Prefix and Suffix (example C8AF-AK) is stamped on tag attached to carburetor by one air horn screw. First letter of second line on tag ("A" etc.) indicates design changes which may affect parts replacement (other letters on this line are assembly code designating time of manufacture).

American Motors – Carburetor code letters (see listing above and corresponding part number) are stamped on tag attached to carburetor by one bowl cover screw.

DESCRIPTION

Two barrel downdraft types with automatic choke. Carburetors are of the same design used on previous models except as follows:



ACCELERATING PUMP DISCHARGE JET HIGH SPEED BLEEDER DRILLING

Idle Limiter Caps - Plastic caps installed on idle mixture adjusting screws to limit range of adjustment for exhaust emission control. Do not remove or deform caps and make certain ears on caps contact stops on carburetor body to provide positive stops for mixture screw adjustment range.

ADJUSTMENT

1968 ADJUSTMENT NOTE - Before making idle speed and mixture adjustment, turn both idle mixture screws counterclockwise to limit of travel with limiter cap ear against stop of carburetor body (all Ford Motor Co. carburetors). On American Motors carburetors, first turn idle mixture screws counterclockwise to limit of travel, then turn screws clockwise ½ turn for leaner mixture. Make adjustments as shown below.

1969 ADJUSTMENT NOTE - Before making idle speed and mixture adjustment, turn both idle mixture screws counterclockwise to limit of travel with limiter cap ear against stop on carburetor body.

Idle Speed & Mixture

Ford Motor Co. (All Models) - Stabilize engine and underhood temperatures by running engine at 1500 RPM for 20 minutes. With engine at normal operating temperature and choke valve wide open, place automatic transmission selector lever in Drive, turn on headlights (to place alternator under load), turn air conditioner ON (except 302" V8 with auto. trans. - air conditioner OFF). Make certain hot idle compensator valve is closed (where used). With air cleaner installed *(NOTE – If necessary to remove air cleaner for adjustment, final idle speed and mixture setting must be checked with air cleaner installed), adjust throttle* stopscrew for correct hot engine idle speed (see Specifications), then turn both idle mixture adjusting screws inward (clockwise) for smoothest possible idle within range of adjusting screw limiters. Recheck idle speed and repeat idle mixture adjustment if necessary.

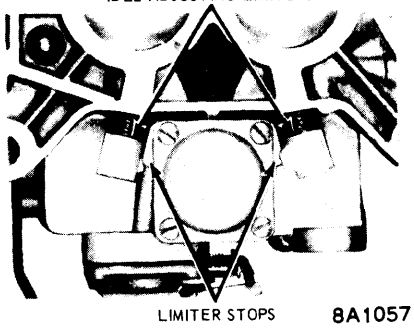
1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)

1968 American Motors (All Models) - With engine at normal operating temperature and with automatic transmission in Drive, air conditioner OFF, adjust throttle stopscrew for specified hot engine idle speed (Synchro-mesh Cars), 50 RPM less than specified (Auto. Trans. Cars) as listed in specifications. Turn both idle mixture screws evenly counterclockwise (for richer mixture) until engine speed begins to drop off, then turn both screws clockwise (for leaner mixture) until speed is regained and continue to turn screws clockwise until speed begins to drop off, finally turn screws counterclockwise until engine speed is just regained (this will assure a "lean as possible" setting and may require that screws be turned to maximum rich stop position). Readjust throttle stopscrew for specified hot idle speed. *NOTE - On synchro-mesh cars, if this final idle speed adjustment requires change over 30 RPM, repeat idle mixture adjustment.*

1969 American Motors (All Models) - With engine at normal operating temperature, automatic transmission in Drive, and air conditioner OFF, adjust throttle stopscrew for correct hot engine idle speed (see Specifications). Starting from full rich (counterclockwise) position of idle mixture screws, turn both screws clockwise or in equally until engine speed drops off due to lean mixture, then turn both screws counterclockwise until highest RPM is obtained at "lean best idle" setting. Readjust throttle stopscrew for specified hot idle speed. *NOTE - If this final idle speed adjustment requires a change of over 30 RPM, repeat idle mixture adjustment.*

►*1968 AMERICAN MOTORS IDLE MIXTURE SCREW LIMITER CAP NOTE:* If limiter caps removed for carburetor overhaul, new caps must be installed after idle mixture adjustment completed (above) as follows: Install right limiter cap with ear against top edge of stop on power valve cover, left limiter cap with ear against bottom edge of stop on power valve cover, by pressing caps on screws squarely until they snap over the screw heads. *CAUTION - Limiter caps should never be removed except for carburetor overhaul.*

►*1969 UNSATISFACTORY IDLE PERFORMANCE CORRECTION:* If idle performance not satisfactory after making above adjustments, idle limiter caps may be removed and carburetor idle speed and mixture adjusted.



IDLE FUEL MIXTURE SCREWS (WITH LIMITER CAPS)

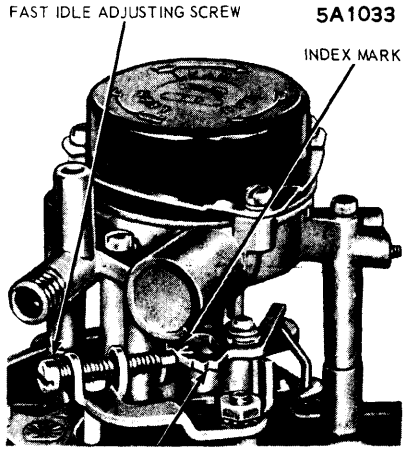
Fast Idle Speed

Ford Motor Co. - With engine at normal operating temperature and air cleaner removed, rotate fast idle cam until fast idle screw rests on center (kick-down) step of cam, adjust fast idle screw for correct engine fast idle speed (see Specifications).

American Motors - With engine at normal operating temperature, rotate fast idle cam until fast idle screw is aligned with index mark on cam, adjust screw for correct engine fast idle speed (see Specifications).

Throttle Linkage (Auto. Trans. Cars)

See CARBURETOR on car model in Tune-Up Section.



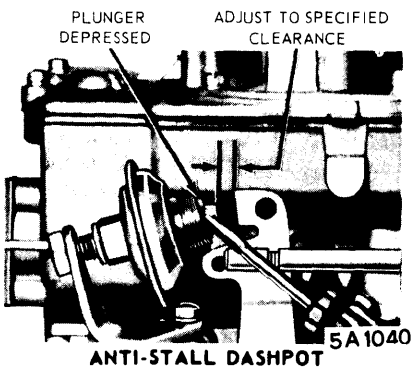
FAST IDLE ADJUSTMENT

Anti-Stall Dashpot

With engine hot or slow idle speed correctly adjusted, and with throttle valves closed, fully depress dashpot plunger and measure clearance between plunger tip and throttle valve lever. If clearance not correct (see table below), adjust by loosening locknut and turning dashpot in or out of mounting bracket.

Dashpot Setting

Car Model	Plunger Clearance
Ford Motor Co. (All Carbs. Except C9ZF-A)	1/8"
C9ZF-A	7/64"
1968 American Motors	3/32"
1969 American Motors	9/64"



ANTI-STALL DASHPOT ADJUSTMENT

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)

CARBURETOR ADJUSTMENT SPECIFICATIONS

Ford Carb. Number	Idle Speed (Engine RPM) ①		Initial Float Setting	Fuel Level	Automatic Choke Setting	Choke Valve Pull-down	Fast Idle Cam Setting	Pump Setting	
	Hot	Fast						Pump Lever	Throttle Lever
C8AF-AK	625	1200	3/8"	3/4"	Index	.120"	.110"	Inner	#2
C8AF-AM	625	1300	3/8"	7/8"	Index	.120"	.170"	Inner	#3
C8AF-AN	550	1500	31/64"	7/8"	Index	.120"	.100"	Inner	#3
C8AF-BA	550	1500	–	–	2 Rich	.150"	.120"	Inner	–
C8AF-BD	650	1400 ④	3/8"	3/4"	2 Rich	.130"	.110"	Inner	#3
C8AF-L	550 ⑤	1400	3/8"	3/4"	1 Lean	.140"	.120"	Inner	#2
C8AF-M	625	1300	31/64"	7/8"	Index	.210"	.170"	Inner	#3
C8AF-N	550	1500	31/64"	7/8"	Index	.120"	.100"	Inner	#3
C80F-H	550 ⑤	1400	–	–	1 Lean	–	–	Inner	#2
C80F-J	625	1300	–	–	Index	–	–	Inner	#3
C80F-K	550	1500	31/64"	7/8"	Index	.120"	.100"	Inner	#3
C80F-AF	550	1500	–	–	2 Rich	.150"	.120"	Inner	–
C80F-U	550	1500	31/64"	7/8"	Index	.120"	.100"	Inner	#3
C8PF-T	–	–	–	–	–	–	–	–	–
C8NF-A	550	1500	–	–	2 Rich	.150"	.120"	Inner	–
C8ZF-G	550	1400	3/8"	3/4"	1 Lean	.140"	.120"	Inner	#2
C9AF-A	550 ⑤	1600 ④	3/8"	3/4"	Index	.120"	.110"	Inner	#2
C9AF-B	650	1300 ④	31/64"	7/8"	1 Rich	.210"	.170"	Inner	#3
C9AF-C	550	1500 ④	31/64"	7/8"	2 Rich	.130"	.100"	Inner	#3
C9AF-J	550	1500 ④	31/64"	7/8"	2 Rich	.130"	.100"	Inner	#3
C9MF-A	550	1500 ④	31/64"	7/8"	2 Rich	.150"	.120"	Inner	#3
C90F-C	550	1600 ④	3/64"	7/8"	2 Rich	.120"	.100"	Inner	#3
C92F-A	650	1300 ④	9/16"	15/16"	1 Rich	.150"	.130"	Inner	#3
C92F-B	550	1600 ④	31/64"	7/8"	2 Rich	.120"	.100"	Inner	#3
C92F-G ⑤	550	1600 ④	3/8"	3/4"	Index	.120"	.110"	Inner	#2
Amer. Mtrs. Code No. ③									
8HA2	550	1600	3/8"	3/4"	Index	.140"	7/64"	Inner	#3
8HM2	650	1600	3/8"	3/4"	Index	.125"	7/64"	Inner	#3
8ZA2	550	1600	3/8"	3/4"	Index	.140	7/64"	Inner	#3
9HA2	550 ⑤	1600 ②	1/2"	13/16"	Index	.140"	7/64"	Inner	#3
9HM2	650 ⑤	1600 ②	1/2"	13/16"	Index	.125"	7/64"	Inner	#3
9ZA2	550 ⑤	1600 ②	1/2"	13/16"	Index	.140"	7/64"	Inner	#3

① - Auto. Trans. in DRIVE, headlights ON and Air Cond. ON (except as noted).
② - With fast idle screw on index mark of fast idle cam.
③ - American Motors code number (stamped on carburetor).
④ - Fast idle screw on CENTER step of fast idle cam.
⑤ - Air Cond. OFF.

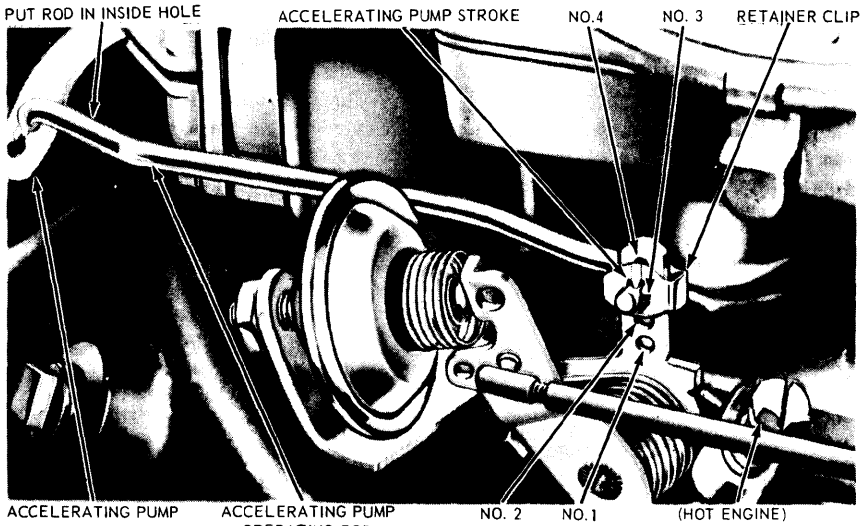
Accelerating Pump Stroke

NOTE - Pump over-travel lever has four holes (No. 1 hole nearest throttle shaft and No. 4 hole furthest from throttle shaft). Accelerating pump plunger lever has two holes. On all carburetors, install pump link in inner hole of pump plunger lever. Install opposite end of pump link in correct hole of over-travel lever (See "Specifications").

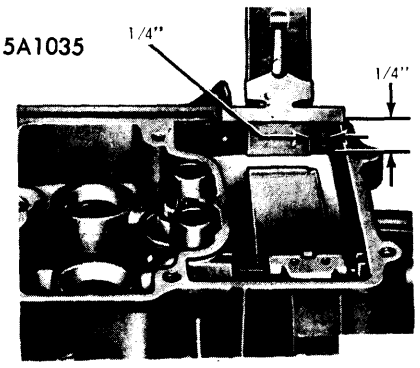
Fuel Level

NOTE - Float setting (on bench) should be used as a guide only. Check and adjust fuel level as follows:
With engine at normal operating temperature, air horn and gasket removed from carburetor, temporarily install air horn gasket in position on carburetor body and start engine. Allow engine to idle a few minutes, then remove

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)

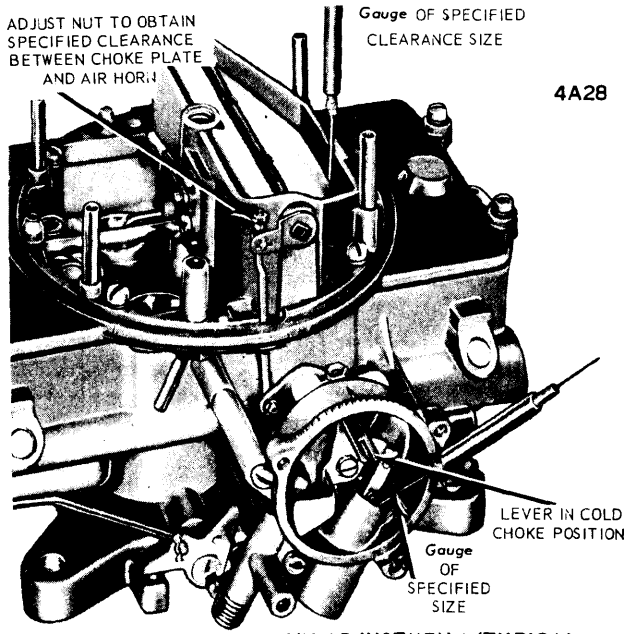


ACCELERATING PUMP ADJUSTMENT



FUEL LEVEL ADJUSTMENT (ON ENGINE)

air horn gasket. With engine idling, measure vertical distance from top machined surface of main body to level of fuel in fuel bowl. *NOTE - Make this measurement at least ¼" from any vertical surface.* If fuel level is not within specifications (see specification table), stop engine and bend float tab contacting fuel inlet valve as necessary. Restart engine and check fuel level after each float tab adjustment. ***CAUTION – Allow fuel level to stabilize by running engine at idle speed for approximately 3 minutes after each adjustment until specified level is obtained.*** After adjustment completed, install air horn with new gasket and readjust carburetor as required.

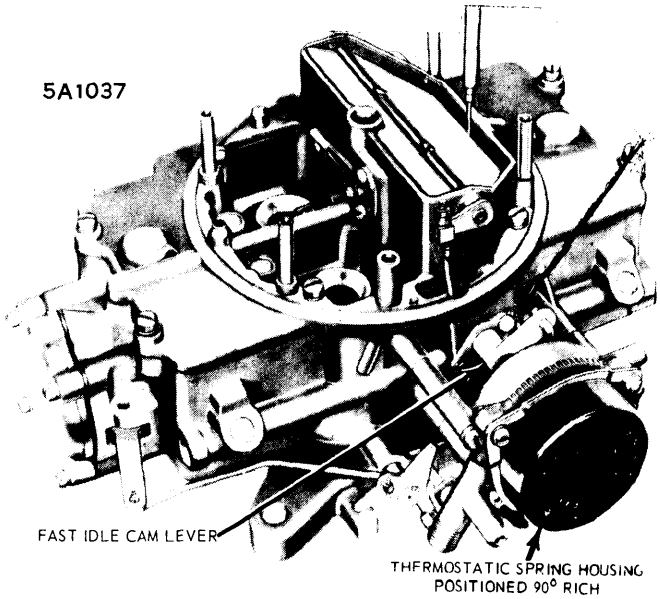


CHOKE VALVE PULL DOWN ADJUSTMENT (TYPICAL)

Choke Valve Pull-Down & Fast Idle Cam Linkage

Choke Valve Pull Down Adjustment – Bend a .036" wire gauge (Ford Motor Co.), and a .035" wire gauge (American Motors) at a 90° angle approximately 1/8" from one end, then remove thermostatic coil spring housing and block throttle valve half way open so fast idle screw is not contacting fast idle cam. Insert bent end of gauge between lower edge of piston slot and upper edge of right hand slot in choke housing (see illustration), then pull choke countershaft lever counterclockwise until gauge is snug in piston slot. Hold wire gauge in position with pressure on countershaft lever, and adjust choke valve clevis (pull-down) adjusting nut to obtain specified clearance (see specifications) between front of choke valve and wall of air horn. Install thermostatic spring coil housing and adjust fast idle cam linkage (following).

Fast Idle Cam Linkage - Loosen choke cover screws and rotate cover and thermostatic coil assembly 90° counter clockwise (Rich) from regular setting, position fast idle screw at index mark on fast idle cam and make certain screw remains in this position during adjustment. **Check clearance between choke valve edge and air horn using correct size gauge or drill (see Specifications). If this clearance not correct, adjust by turning fast idle** cam lever adjusting screw on fast idle cam lever behind choke housing (see illustration) in to increase clearance, or out to decrease clearance, as required. *CAUTION - Fast idle screw must remain at index mark on fast idle cam during this adjustment.* Readjust automatic choke to correct specification (See below).

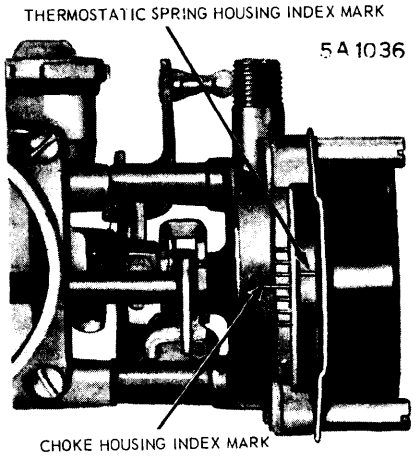


FAST IDLE CAM LINKAGE ADJUSTMENT (TYPICAL)

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)

Automatic Choke

Loosen thermostatic coil housing clamp screws and align index mark on coil housing with proper mark on choke housing (see specifications).



AUTOMATIC CHOKE ADJUSTMENT

Unloader

Hold throttle valves in wide open position and check clearance between upper edge of choke valve and air horn wall. If this clearance not correct (see Specifications below), adjust by bending tab on fast idle speed lever on throttle shaft as required.

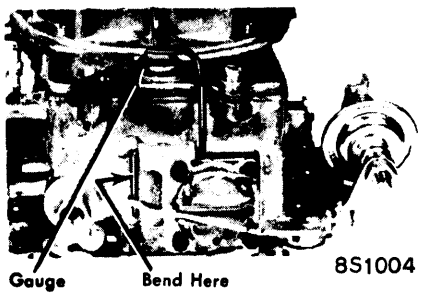
Unloader Setting

Car Model	Choke Valve Clearance
Ford Motor Co. (All Carbs.)	.060"
American Motors (All Carbs.)	5/64"

Fuel Bowl Vent

NOTE - When used, vent valve assembly (valve, spring-loaded arm and shaft, and bracket) are mounted on accelerating pump cover and operated by extended tang on pump lever (see illustration).

Adjustment - Check vent valve clearance with throttle valves closed in curb idle position and choke valve wide open. Use drill rod of specified size (see specifications below) between lower surface of vent valve and valve seat on bowl cover at center of valve. If clearance not correct, adjust by bending extended tang on bowl vent rod (which operates valve) inward to increase, or outward to decrease vent valve clearance.



BOWL VENT ADJUSTMENT

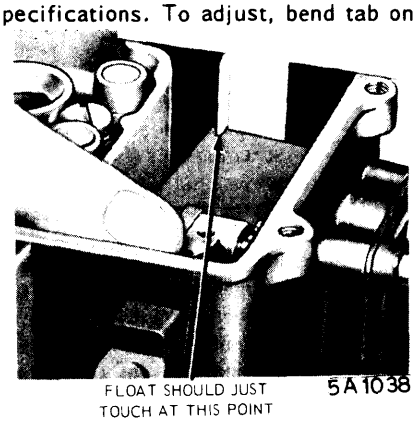
Fuel Bowl Vent Setting

Car Model	Vent Valve Clearance
Ford Motor Co. (All Carbs. except below)	.070"
C8AF-BD & C9ZF-A	.080"
American Motors (All Carbs.)	1/16" (.065")

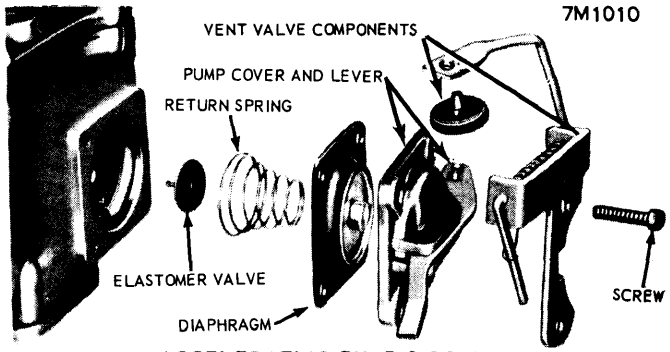
ADJUSTMENT (OFF ENGINE)

Float Level

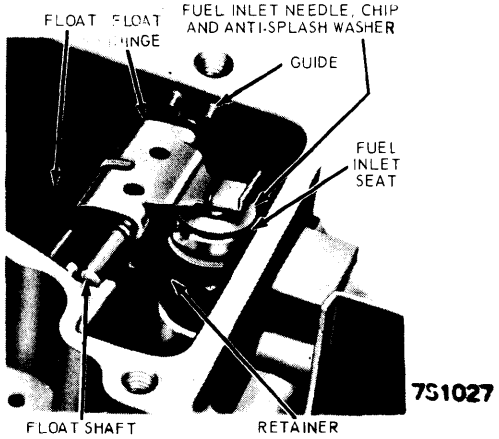
CAUTION - Fuel inlet needle is "Viton" tipped. Do not place excessive force on needle as damage will result. With air horn removed, raise float so needle valve is seated, then check distance between gasket surface of main body and top of float at a point 1/8" from free end of float and 5/16" in from side of float adjacent to inside wall of fuel bowl. This measurement should be as indicated in specifications. To adjust, bend tab on float arm.



DRY FLOAT LEVEL ADJUSTMENT



ACCELERATING PUMP & BOWL VENT VALVE ASSEMBLY



FLOAT & INTAKE NEEDLE ASSEMBLY

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)

OVERHAUL

Disassembly

Air Horn - 1) Remove air cleaner anchor screw and automatic choke control rod retainer, then remove air horn and gasket from main body. On a vacuum piston choke carubretor, remove choke control rod from air horn, then slide felt seal and two washers out of air horn.
2) If it is necessary to remove choke valve, remove staking on retaining screws and remove screws, then slide plate out of shaft (from top) and remove shaft.
3) On a manual choke carburetor, remove choke plate in same manner as for vacuum choke, then rotate choke lever and remove choke plate rod. Slide choke shaft out of air horn, and remove felt seal and washers.

Automatic Choke - 1) Remove fast idle cam retainer, then remove thermostatic choke cover retaining screws and remove clamp, cover assembly, and gasket.
2) Remove choke housing assembly retaining screws and remove choke housing assembly, gasket, and fast idle cam. Remove fast idle cam and rod from fast idle cam lever.
3) Remove choke lever retaining screw and washer from end of shaft within housing, remove choke piston lever by rotating lever to withdraw vacuum piston from cylinder. If necessary to remove piston from link, remove pin. Remove choke lever and fast idle cam lever from choke housing.

NOTE – If idle limiter caps have been removed for adjustment or overhaul of carburetors on 1968 Ford Motor Co. cars, see replacement procedure in "Ford Motor Co. IMCO & Thermactor Engines" in this section.

Main Body - 1) Disconnect float shaft retainer and remove float, torsion spring and shaft and the fuel inlet needle and clip assembly. Remove fuel inlet needle seat and filter screen from bowl. Remove main jets with a suitable jet wrench.

2) Remove accelerator pump discharge screw, air distribution plate (if so equipped), and booster venturi. Invert body and remove pump discharge weight and ball, then remove fuel inlet fitting. Remove pump operating rod from over-travel lever.

3) Remove pump cover retaining screws and remove vent valve assembly, pump cover, diaphragm assembly, and return spring. If necessary to remove Elastomer (rubber) pump inlet valve from pump recess, grasp valve firmly and pull it out (if valve tip breaks off during removal, be sure to remove tip from fuel bowl). Discard valve. *CAUTION - New Elastomer valve must be installed whenever valve removed from carburetor. See Reassembly.*

4) Remove power valve using a suitable box or socket wrench, remove and discard power valve gasket. Remove idle mixture adjusting screws and springs (1968 carbs.), remove idle limiter caps and idle mixture screws and springs (1969 carbs.). Remove anti-stall dashpot (if used). If necessary, remove fast idle adjusting lever assembly by removing nut and washer securing assembly to throttle valve shaft, remove screw and retainer from fast idle adjusting lever.

5) If necessary to remove throttle valves, lightly scribe valves along throttle shaft and mark each valve and bore for reassembly in same location. Remove throttle shaft, then remove accelerating pump over-travel lever retainer and slide lever assembly off shaft.

Reassembly

Reverse disassembly procedure and note the following:

Throttle Valve Installation - Refer to scribed lines and marks made at disassembly and install throttle valves with attaching screws snug (not tight), close valves and check fit by holding assembly up to a light (little or no light should show between valves edges and bore). Tap valves lightly to centralize them, then tighten screws securely stake screws while supporting shaft on a metal bar.

Choke Valve Installation - Install choke valve with attaching screws snug (not tight), check valve fit and free operation by moving valve from closed to open position (binding can be corrected by grinding edge of valve), then tighten screws securely while holding valve closed. Stake screws while supporting shaft on metal bar.

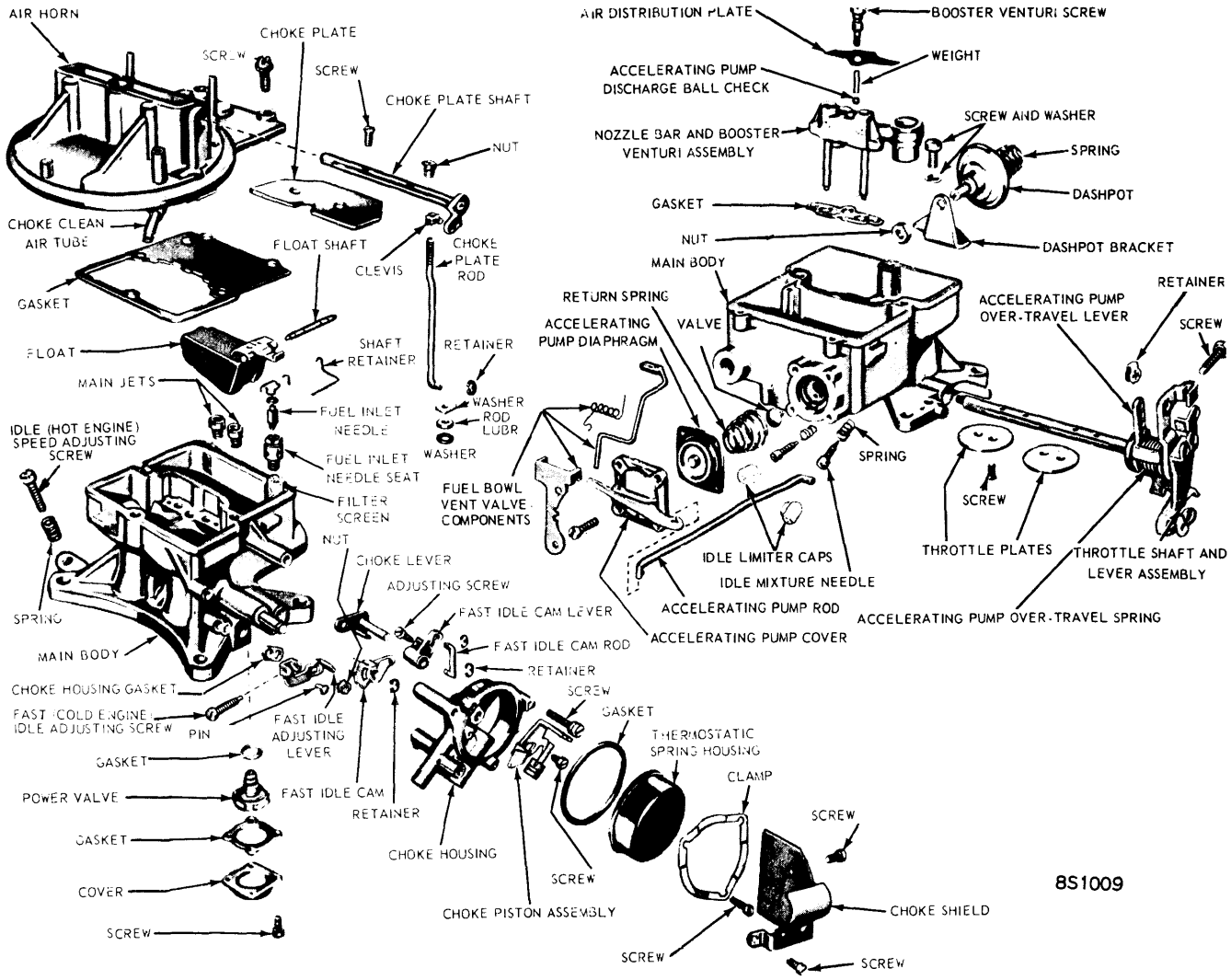
Choke Valve Rod & Seal Installation – Assemble choke rod seal between two brass washers and slide them into position on seal retainer, insert choke rod through seal and air horn to engage choke shaft lever clevis nut, turn nut clockwise to thread rod on the nut. *NOTE* - Rod is adjusted during "Choke Valve Pull-down" adjustment.

Accelerating Pump Elastomer Valve Installation - Lubricate tip of new valve and insert valve tip in center hole in pump cavity, then use needle nosed pliers inserted in fuel bowl to pull valve in until it is fully seated, cut off valve tip at retaining shoulder and remove tip from fuel bowl.

Accelerating Pump Diaphragm Installation - Position return spring on boss in pump chamber, assemble diaphragm and cover and install two cover screws that do not retain vent valve bracket. Insert a new plug in vent rod, and install vent rod and bracket assembly on pump.

Idle Mixture Screw Installation - Install idle mixture needles and springs. Turn screws in until lightly seated, then back off 1½ turns (Ford Motor Co.) or 2 turns (American Motors) for an initial adjustment. *NOTE - Idle limiter caps should not be installed until final idle mixture adjustment is made.*

1968-69 FORD (AUTOLITE) 2-BARREL MODELS 2100 & 6200 (Continued)



FORD 2-BBL. MODELS 2100 & 6200 CARBURETOR ASSEMBLY