1968-69 CARTER YF SINGLE BARREL

1968

FALCON	Carter No.	① Ford No.
170" 6 Cyl. Synchro-mesh	4493S	C8DF-A
Auto. Trans.	4494S	C8DF-B

FORD

240" 6 Cyl. Synchro-mesh	4497S	C8AF-V

① – Ford carburetor number prefix and suffix with basic part number (9510) omitted.

1969

	Ford Carburetor No.	
FALCON	**Synchro-mesh**	**Auto. Trans.**
170" 6 Cyl.	① C8DF-H	② C8DF-G

FORD & METEOR

240" 6 Cyl.	③ C8AF-BF	⑭

MAVERICK (1970)

170" 6 Cyl.	DODF-A	DODF-B
With Air Cond.	DODF-E	DODF-F
200" 6 Cyl.	DODF-C	DODF-D
With Air Cond.	DODF-G	DODF-H

① – Carter 4705S. ② – Carter 4706S. ③ – Carter 4669S.
⑭ – Ford Model 1101 carburetor used on this model.

►CHANGES, CAUTIONS, CORRECTIONS

►*IMCO & THERMACTOR ENGINE NOTE:* These engines have special exhaust emission controls as follows: **All Engines** – Specially calibrated distributor and carburetor, closed positive crankcase ventilation system, and distributor vacuum advance control valve to advance timing during deceleration. **Thermactor Engines** – Also have air pump for air injection in engine at exhaust valve ports (Used on Synchro-mesh cars only).

CARBURETOR IDENTIFICATION

Carter carburetor number or Ford (Autolite) part number prefix and suffix designation stamped on tag attached to carburetor by one air horn screw.

DESCRIPTION

Single barrel downdraft type with diaphragm type accelerating pump and integral automatic choke.

1968 Carburetors – Are similar to previous models except for idle limiter (sealed) adjustment, which consists of a factory adjusted and sealed adjusting screw located directly above the idle mixture. *Do not remove seal or attempt to adjust this screw when making idle speed and mixture adjustment.*

1969 Carburetors – Are similar to previous models except for new idle limiter caps and solenoid throttle modulator (some carburetors).

NOTE – Idle Limiter (Sealed) Adjustment discontinued on 1969 carburetors.

Idle Limiter Cap (1969) – Idle mixture adjusting screw has idle limiter cap installed on screw which limits range of adjustment for exhaust emission control. Do not remove or deform limiter cap and make certain ear on cap contacts stop on carburetor body to provide positive stops for mixture screw adjustment range.

Solenoid Throttle Modulator (1969) – Used on some carburetors. Consists of a solenoid operated plunger controlling engine idling speed. When ignition is turned off, regular throttle stopscrew allows throttle valve to close further. Requires special idle speed adjustment procedure. See *Adjustments.*

ADJUSTMENT

1969 CARBURETOR NOTE – If initial adjustment required to warm up engine, turn idle mixture screw out 1-1½ turns from lightly seated position, turn idle speed screw in 1½ turns from initial contact with throttle lever. Make idle adjustment with headlights ON, automatic transmission in DRIVE, and air conditioner ON, Air cleaner should be installed.

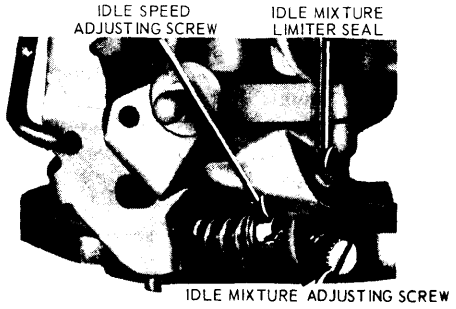
1969 CARBURETOR NOTE – Before making idle speed and mixture adjustment, turn idle mixture screw counterclockwise to limit of travel with limiter cap ear against stop on carburetor body. Stabilize engine and underhood temperature by running engine for minimum of 20 minutes at 1500 RPM.

Idle Speed & Mixture

1968 Carburetors – With engine at normal operating temperature (with choke valve wide open and fast idle inoperative) adjust throttle stopscrew for correct engine idle speed *(see Specifications).* Adjust idle mixture screw for smoothest engine operation. Recheck idle speed with air cleaner in place. If necessary to readjust idle speed, repeat idle mixture adjustment.

1969 Carburetors – With engine at normal operating temperature (choke valve wide open and fast idle inoperative) place automatic transmission lever in Drive ("1" on Maverick Semi-automatic), turn on headlights (placing alternator under load), turn air conditioner ON (except as noted in specifications), make certain air cleaner installed (if it was necessary to remove air cleaner for adjustment, final idle setting and fuel mixture setting must be checked after air cleaner installed). Adjust each engine as follows:

Carburetors Without Solenoid Throttle Modulator – Adjust throttle stopscrew for correct hot engine idle speed *(see Specifications),* turn idle mixture screw in (clockwise) for smoothest possible idle within range of adjusting screw limiter. Recheck idle speed and repeat idle mixture adjustment if necessary.



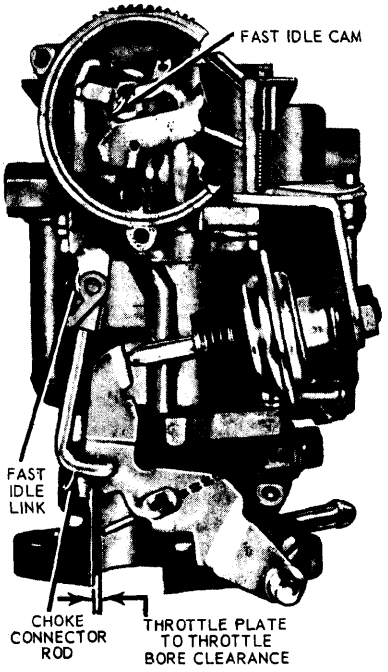
IDLE SPEED & MIXTURE ADJUSTMENT

1968-69 CARTER YF SINGLE BARREL (Continued)

Carburetors With Solenoid Throttle Modulator – Turn **solenoid plunger screw** in or out to obtain specified curb idle speed (higher speed as listed in Specifications). *NOTE – Solenoid must be energized (lead connected and ignition ON).* Turn idle mixture screw in (clockwise) for smoothest possible idle speed and repeat idle mixture adjustment if necessary. Disconnect solenoid lead (throttle valve will close further) and adjust **throttle stopscrew** for correct idle speed (lower speed as listed in Specifications). Reconnect solenoid lead, open throttle valve slightly by hand. Solenoid plunger should follow throttle lever and increase idle speed to "solenoid energized" specifications.

Fast Idle Speed (Off Engine)

NOTE - Carburetor must be removed from engine to gauge throttle valve opening when making this adjustment.

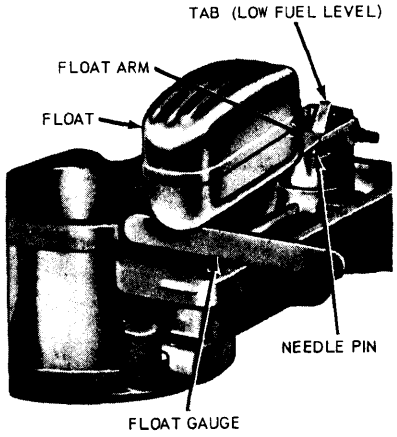


FAST IDLE SPEED ADJUSTMENT

Open throttle valve and fully close choke valve to allow fast idle cam (in choke housing) to revolve to fast idle position, then close throttle valve as far as possible. Use drill rod of correct size (see Specifications) to check clearance between lower edge of throttle valve and carburetor bore. If clearance not correct, adjust by bending choke connector rod at lower angle near throttle lever as required.

Float Level

Remove air horn and float assembly from carburetor, remove air horn gasket and invert assembly so that weight of float is on seated intake needle. Use gauge of correct size (see Specifications) to measure distance from gasket seat on air horn to top of float at free end (see illustration). *CAUTION - Weight of float only should be on intake needle (excessive pressure will compress spring-loaded needle and cause false setting).* If distance not correct, adjust by bending float arm. *NOTE* - Do not bend tab at end of float arm. This dry float setting is only float adjustment required.



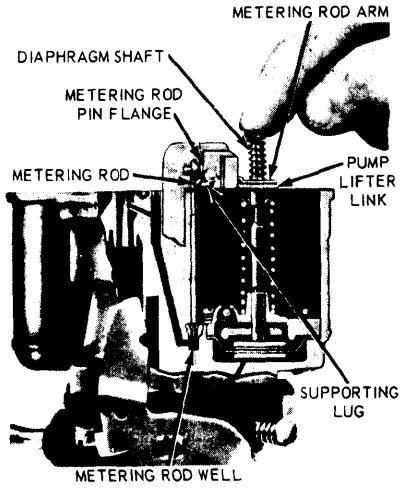
FLOAT LEVEL ADJUSTMENT

Accelerating Pump

No adjustment required.

Metering Rod

With air horn assembly removed and throttle valve closed, press down on diaphragm shaft until it bottoms in vacuum chamber. At this point, metering rod should touch bottom of metering rod well and metering rod arm should contact lifter link at lifting lug and at diaphragm shaft. Adjust by bending metering rod pin flange (on metering rod arm) up or down as required. Reinstall air horn using new gasket.



METERING ROD ADJUSTMENT

Unloader

Remove automatic choke cover and thermostatic coil assembly, gasket, and baffle. Hold throttle valve fully open and close choke valve as far as possible with light pressure. Measure choke valve opening or clearance between lower edge of valve and air horn wall using gauge or drill rod of correct size (see Specifications). If clearance not correct, adjust by bending choke trip lever arm within choke housing (bend arm downward to increase choke valve clearance). When reinstalling choke cover and coil assembly, make certain coil engages tang on choke lever and shaft assembly.

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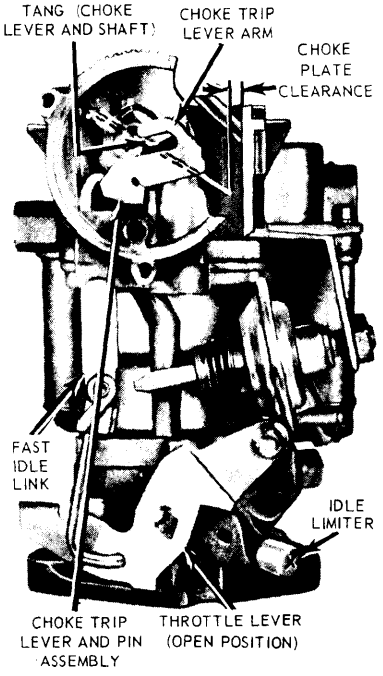
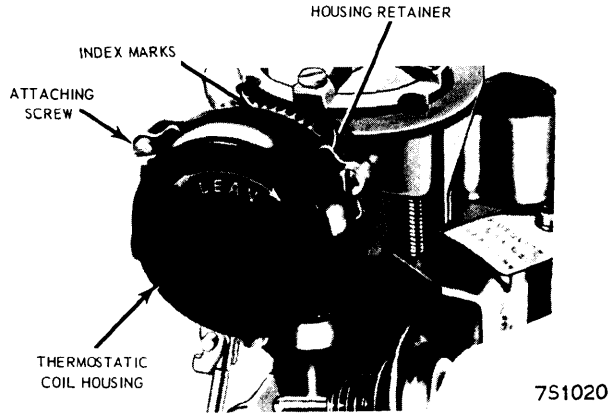
Automatic Choke

Loosen attaching screws and rotate choke cover to align index mark on cover with correct graduation of scale on housing (see Specifications).



CHOKE VALVE PULL-DOWN CLEARANCE ADJUSTMENT



AUTOMATIC CHOKE ADJUSTMENT

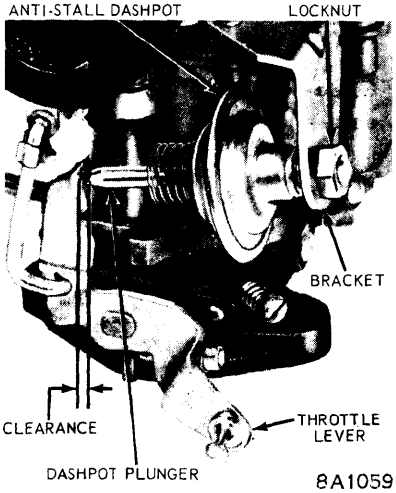
Dashpot

NOTE - Dashpot not used on carburetors with Solenoid Throttle Modulator.

With choke valve wide open and throttle valve closed in curb idle position, hold dashpot plunger fully depressed and measure clearance between end of dashpot plunger stem and throttle lever. If clearance not correct (see Specifications), adjust by turning dashpot in or out of mounting bracket. Tighten locknut after completing adjustment.

CARBURETOR ADJUSTMENT SPECIFICATIONS

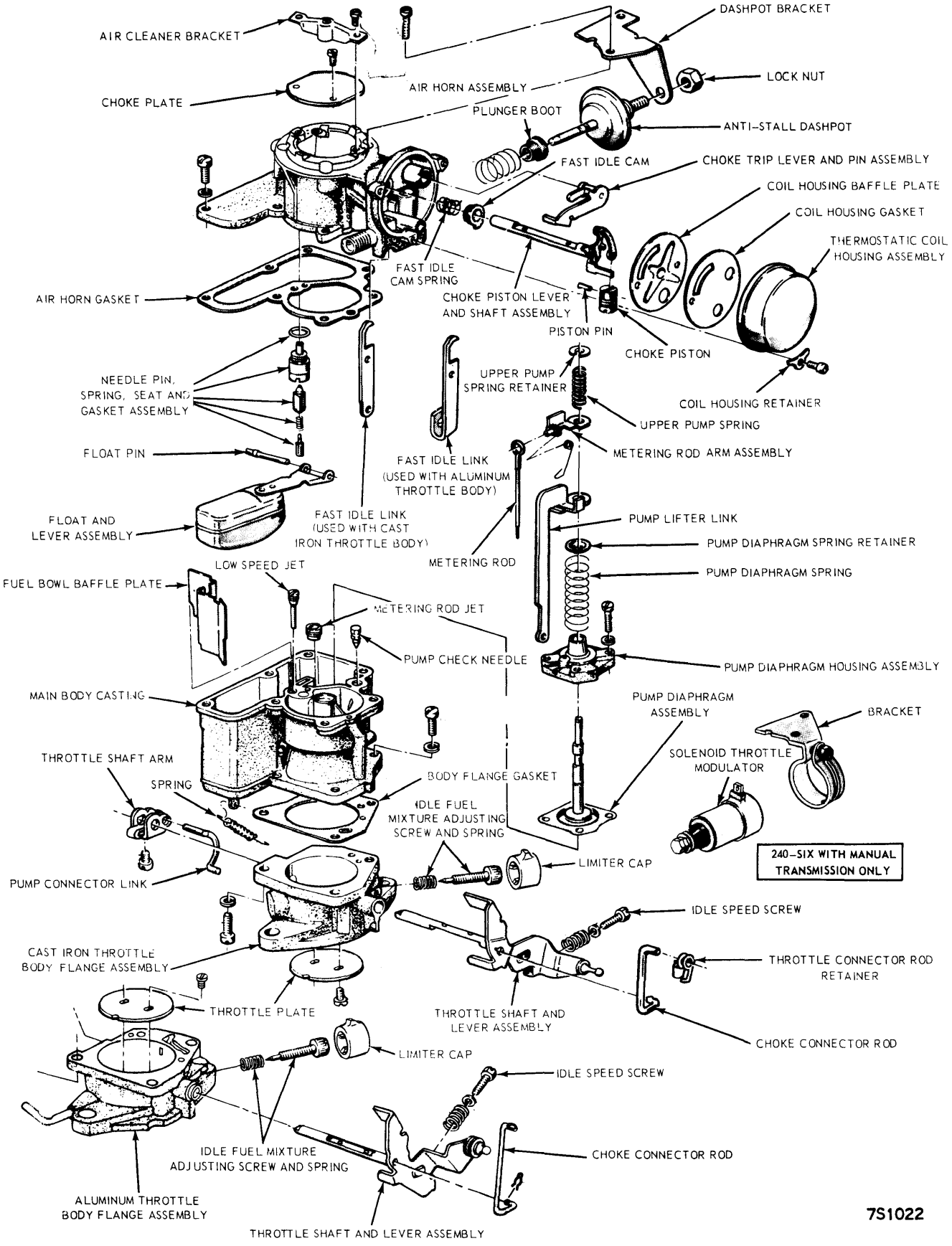
Carb. No. (Ford)	Idle Speed (Eng. RPM) Hot ①	Float Level Setting	Fast Idle (Throttle Clearance)	Unloader Setting	Auto. Choke Setting	Dashpot Setting
C8DF-A	700	7/32"	.035"	.280"	1 Lean	.100"
C8DF-B	550	7/32"	.046"	.280"	1 Lean	.100"
C8AF-V	600	7/32"	.035"	.280"	Index	.100"
C8AF-BF①	775/500 ④	7/32"	.035"	.280"	Index	②
C8DF-G①	550	7/32"	.046"	.280"	Index	.100" ③
C8DF-H①	750	7/32"	.040"	.280"	1 Lean	.100" ③
DODF-A①	750	7/32"	.042"	.280"	1 Rich	.100"
DODF-B①	550	7/32"	.042"	.280"	1 Rich	.100"
DODF-C①	750	7/32"	.030"	.250"	Index	.100"
DODF-D①	550	7/32"	.035"	.250"	Index	.100"
DODF-E①	750/500 ④	7/32"	–	–	–	②
DODF-F①	550/475 ④	7/32"	–	–	–	②
DODF-G①	750/500 ④	7/32"	–	–	–	②
DODF-H①	550/475④⑤	7/32"	–	–	–	②



DASHPOT ADJUSTMENT

① – Headlights ON – Air Conditioner ON.
② – Solenoid Equipped.
③ – Setting (± .030).
④ – Higher Idle Speed with throttle solenoid energized. Lower Idle Speed with throttle solenoid de-energized.
⑤ – Air Conditioner OFF.

1968-69 CARTER YF SINGLE BARREL (Continued)



CARTER YF SINGLE BARREL CARBURETOR ASSEMBLY (WITH INTEGRAL AUTOMATIC CHOKE)

1968-69 CARTER YF SINGLE BARREL (Continued)

OVERHAUL

Disassembly

1) Disengage choke connector rod from fast idle link. Remove thermostatic coil housing assembly, gasket, and baffle plate. Remove choke trip lever and pin assembly and fast idle link from choke housing.

2) Remove air horn assembly attaching screws and dashpot and bracket assembly, lift air horn assembly straight up and off, remove air horn gasket. Disassemble and remove float and lever assembly, intake needle, spring, and seat.

3) File staked ends of choke valve screws, remove screws, remove choke valve. Disengage fast idle cam spring from cam spring lever on choke piston lever and shaft assembly, rotate choke shaft and piston assembly counterclockwise to free choke piston from cylinder, withdraw assembly from air horn. Remove piston pin, piston, fast idle cam and fast idle cam spring from choke piston lever and shaft assembly.

4) Turn body casting upside down and catch accelerating pump check needle in hand. Disconnect throttle shaft arm spring, loosen screw, and remove arm and pump connector link.

5) Remove accelerating pump diaphragm assembly, pump lifter link, metering rod and fuel bowl baffle plate as a unit. Remove metering rod from arm, then compress upper pump spring and remove retainer, spring, metering rod arm, and pump lifter link assembly. Compress lower spring and remove spring retainer, lower spring, and pump diaphragm assembly.

6) Remove low speed jet. *NOTE - Use proper size jet tool or screwdriver.* Remove throttle body flange and gasket. File staked ends of throttle valve retaining screws if necessary, and remove. Slide out throttle shaft and lever assembly. *CAUTION - Do not remove idle mixture limiter caps or mixture screws from throttle body.*

Cleaning & Inspection

Wash all parts in carburetor cleaning solution. *CAUTION - Do not immerse accelerating pump diaphragm, power valve, secondary operating diaphragm, and dashpot assembly in solution.* Inspect all parts for wear or damage and replace if necessary. Blow out all passages with air.

Reassembly

1) With choke piston and pin assembled on choke piston lever and shaft assembly, disengage cam spring from cam spring lever, install choke shaft assembly in air horn and rotate assembly clockwise until piston pin is within piston cylinder. Position cam spring on cam spring lever so that tangs on cam and choke lever are aligned (in front of each other). Install choke valve and tighten screws just snug, check valve movement for free movement without binding, then tighten screws and peen or stake to prevent loosening.

2) Install throttle valve with notch aligned with slotted idle port, install screws and tighten just snug, check for free movement without binding, then tighten screws and peen or stake to prevent loosening. Reverse disassembly procedure and note the following: Install new gaskets. Be sure vacuum passage in the diaphragm housing is aligned with vacuum passage in main body.