1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors

1975-79 Ford Motor Co.
1975-78 Jeep Corp.

CARBURETOR APPLICATION

1975 FORD MOTOR CO. (MODEL YFA)

Application	Ford Part No. Man. Trans.	Ford Part No. Auto. Trans.
300" 6-Cyl.		
F100	ALA, APA	ADA, AKA
F150, 250 & 350		
Federal		AMA
California	AGA	AGA
F250, 350 (4X2) & F250 (4X4)		
Federal Only		ANA
P350 [1]		
Federal	AGA, AUA	
California	AFA	AFA

[1] – Prefix designation is D4TE. All others are D5TE.

1976 FORD MOTOR CO. (MODEL YFA)

Application	Ford Part No. Man. Trans.	Ford Part No. Auto. Trans.
300" 6-Cyl.		
F100		
Federal	D5UE-EA	D5TE-ADA, ADB
California	D6TE-DA, D5TE-APA	D5TE-AKA, AKB D5TE-CBA
E100		
Federal	D5UE-EA	D5UE-FA
California	D6TE-DA	D5UE-HB
All Other E & F Models		
Federal		D5TE-AMA, ANA
California	D5TE-AGA	D5TE-AGA
P Models		
Federal	D4TE-AGA	D5TE-AFA

1977 FORD MOTOR CO. (MODEL YFA)

Application	Ford Part No. Man. Trans.	Ford Part No. Auto. Trans.
300" 6-Cyl.		
E100 & F100		
Federal	[1] D7TE-MA	[1] D7TE-MA
	[2] D7TE-CDA	[2] D7TE-CEA
California	[1] D7TE-PA, [2] CFA	
E150, 250 & 350		
Federal	D5TE-AGA	D5TE-AGA
	[3] D5TEAGB	[3] D5TE-AGB
California	[4] D7TE-CAA	[4] D7TE-CAA
F150, 250 & 350		
Federal	D5TE-AGA	D5TE-AGA
	[3] D5TE-AGB	[3] D5TE-AGB
California	[4] D7TE-CAA	[4] D7TE-CAA

[1] – Before serial No. Y20,001
[2] – From serial No. Y20,000
[3] – Before serial No. X80,001
[4] – From serial No. X80,000

1978 FORD MOTOR CO. (MODEL YFA)

Application	Ford Part No. Man. Trans.	Ford Part No. Auto. Trans.
300" 6-Cyl.		
E100 & F100		
Federal	[1] D8TE-BVA	D8TE-BWA
	[2] D8TE-CKB	
	D8UE-AAA	
California	D8UE-ZA	D8TE-CNA
	D8TE-BUA	
	D8TE-AAA	

[1] – With 3-speed transmission.
[2] – With 4-speed transmission.

1979 FORD MOTOR CO. (MODEL YFA)

Application	[1] Ford Part No. Man. Trans.	[1] Ford Part No. Auto. Trans.
300" 6-Cyl.		
E100, 150 & 250		
Federal	D9UE-FA	D9TE-LA, NA
California	D9TE-ZB	
F100, 150 & 250		
Federal	D9TE-MA	D9TE-LA, NA
California	D9TE-KA	
E & F 350	D9TE-CA	D9TE-VA

[1] – Basic part No. is 9510.

1975 JEEP (MODEL YF)

Application	Jeep Code No. Man. Trans.	Jeep Code No. Auto. Trans.
CJ5 & CJ6 232" & 258"		
Federal		7040
California		7041
Cherokee & J10 258"	7043	7043

1976 JEEP (MODEL YF)

Application	Jeep Code No. Man. Trans.	Jeep Code No. Auto. Trans.
CJ5 & CJ7 232" & 258"		
Federal	7109	[1] 7083
California	7084	7085
Cherokee, J10 & J20	7088	7088

[1] – CJ7 models with 258" only, prior to serial No. A50,000.

1977 JEEP (MODEL YF)

Application	Jeep Code No. Man. Trans.	Jeep Code No. Auto. Trans.
CJ5 232" [1] & 258"		
Federal	7154	
California	7154	
High Altitude	7110	
CJ7		
Federal	7154	7151
Calif.	7154	7153
High Altitude	7110	7111

[1] – Not available in California.

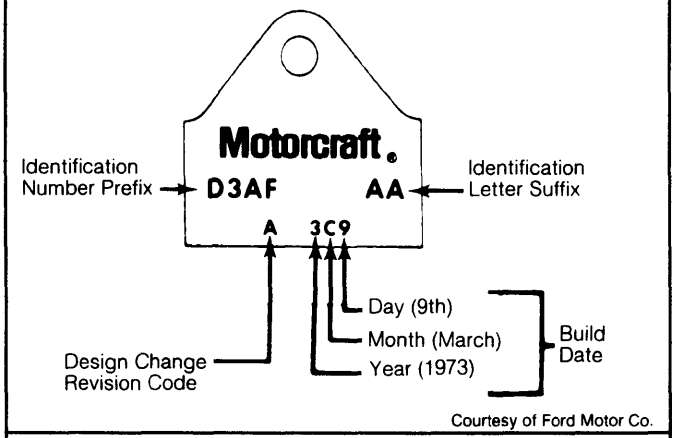
1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors (Cont.)

1978 JEEP (MODEL YF)

Application	Jeep Code No. Man. Trans.	Jeep Code No. Auto. Trans.
All Models 232"		
Federal	7230	
California	7230	
All Models 258"		
Federal	7230	7228
Calif.	72304	7201
High Altitude		7231

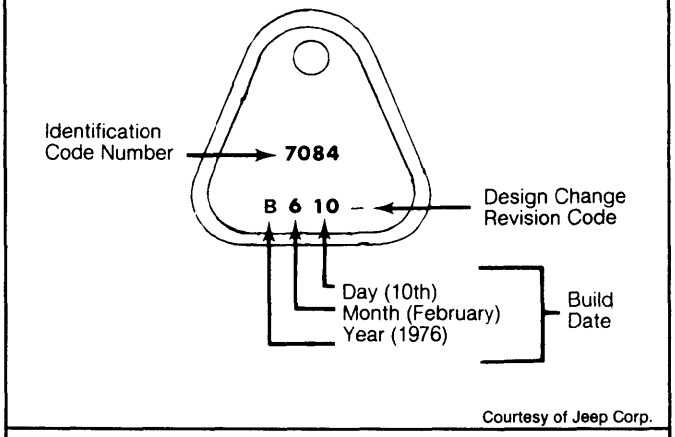
CARBURETOR IDENTIFICATION

A carburetor identification tag is attached to carburetor. Tag contains part number prefix and suffix, design change code, if any, and assembly date code, including year, month and day. To obtain replacement parts, it is necessary to know identification number prefix and suffix, and in some instances, the design change code.



Courtesy of Ford Motor Co.

Fig. 1: Ford Motor Co. Carburetor Identification Tag



Courtesy of Jeep Corp.

Fig. 2: Jeep Carburetor Identification Tag

DESCRIPTION

Carter YF and YFA carburetors are made up of 3 main assemblies: air horn, main body and throttle body. YFA carburetors have an adjustment limiting vacuum diaphragm type automatic choke with an electric assist choke cap. The main body contains a temperature compensated accelerator pump which has a thermostatic disc designed to open and close within a specified range.

In 1978 YF carburetors installed on Jeep vehicles for use in High Altitude areas are equipped with High Altitude Compensator. This system is made up of a chamber assembly, gasket and screws mounted in air horn.

Carburetors on Ford Motor Company and Jeep vehicles equipped with air conditioning or automatic transmissions (in California), use an idle speed solenoid to prevent dieseling when ignition is turned off. Some models are equipped with a throttle lever dashpot to reduce the chance of stalling when the throttle is closed quickly.

ADJUSTMENTS

NOTE: For all on-vehicle adjustments not covered in this article, see appropriate TUNE-UP article.

FLOAT LEVEL

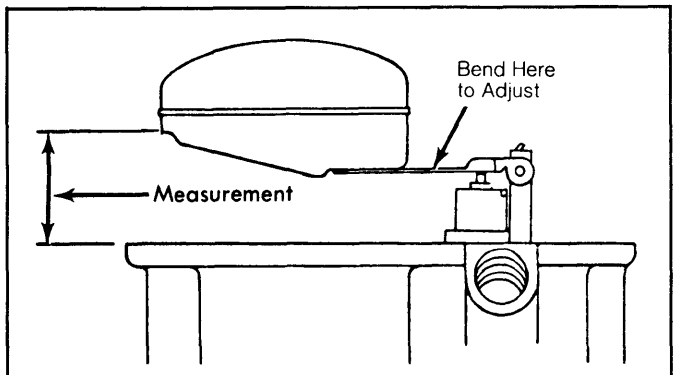
1) Remove air cleaner assembly. Remove air horn and gasket from top of carburetor.

2) Turn air horn assembly upside-down. Measure distance between top of float at free end and gasket surface of air horn.

NOTE: Do not apply pressure against needle when adjusting float.

3) Bend float arm as necessary to obtain correct clearance. DO NOT bend tab at end of float arm as this will stop float travel to bottom of fuel bowl when empty.

4) When adjustment is completed, reinstall air horn and new gasket. Start engine and check for fuel leaks. Install air cleaner.



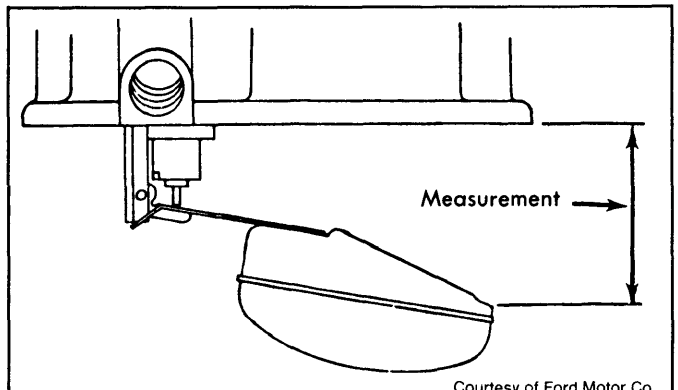
Courtesy of Ford Motor Co.

Fig. 3: Float Level Adjustment

FLOAT DROP

1) Remove air cleaner, carburetor air horn and gasket from top of carburetor.

2) Hold air horn in upright position. Allow float to hang free. Using specified gauge, measure minimum clearance from tip of float to bottom of air horn casting. *See Fig. 4.*



Courtesy of Ford Motor Co.

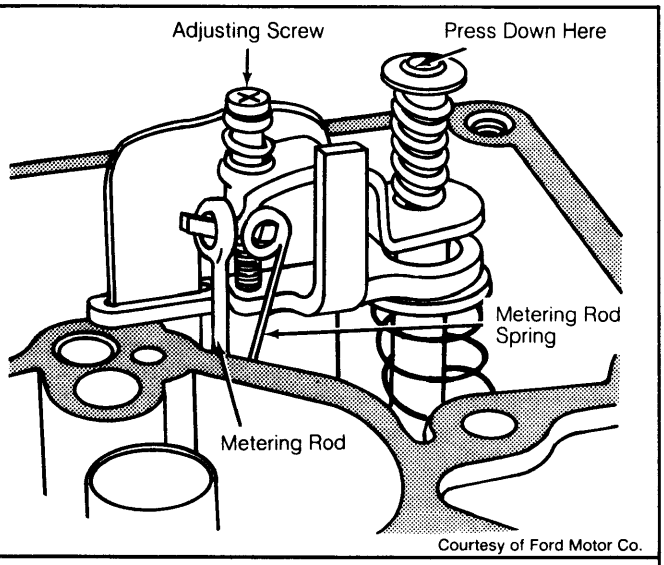
Fig. 4: Float Drop Adjustment

3) Bend tab at end of float arm to adjust. After completing adjustment, install air horn and a new gasket on carburetor. Start engine and check for fuel leaks. Install air cleaner.

1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors (Cont.)

METERING ROD

1) Remove air cleaner, air horn and gasket from carburetor.
2) Using a side cutter, remove the tamper proof cup covering the closed valve adjusting screw. Back out adjusting screw until it is clear of the casting.
3) Press down on top of pump diaphragm shaft until assembly bottoms. While holding diaphragm assembly in this position, turn rod adjustment screw counterclockwise until metering rod gently bottoms in body casting. *See Fig. 5.*



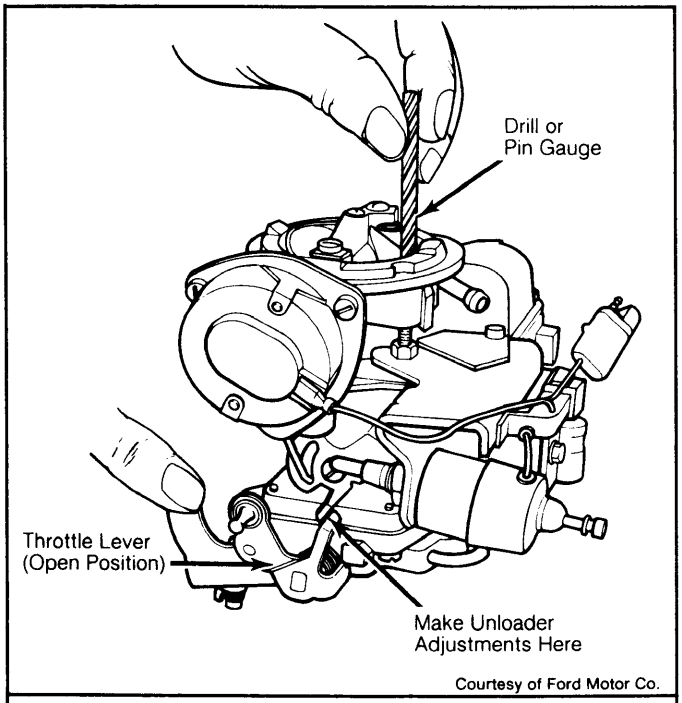
Courtesy of Ford Motor Co.

Fig. 5: Metering Rod Adjustment

4) Now turn metering rod adjustment screw clockwise (IN) one turn for final adjustment. Install air horn and new gasket on carburetor.

CHOKE UNLOADER (DECHOKE)

1) Remove air cleaner. Hold throttle valve in fully open position and press choke valve toward closed position.
2) Measure clearance between lower edge of choke valve and air horn wall.
3) Adjust by bending arm on choke lever of throttle lever. *See Fig. 6.*



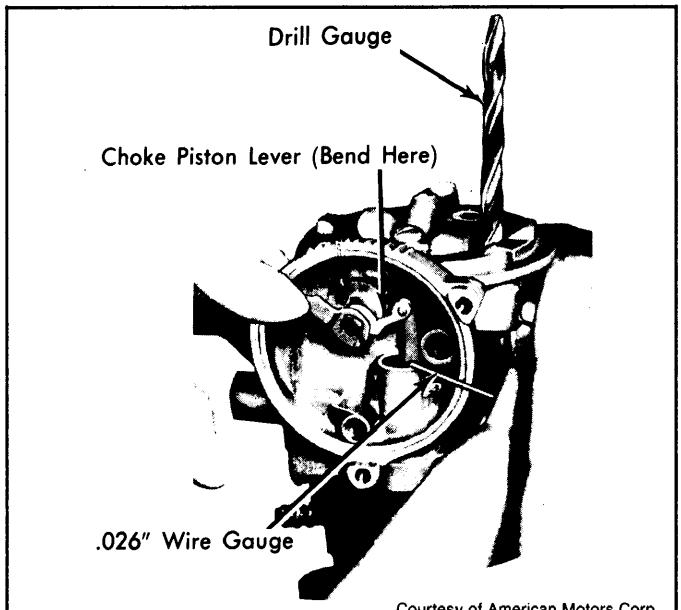
Courtesy of Ford Motor Co.

Fig. 6: Choke Unloader (Dechoke) Adjustment

4) Bend arm upward to increase clearance; bend downward, away from fast idle cam, to decrease clearance.
5) Operate throttle to check for binding or clearance interference. Install air cleaner.

CHOKE PLATE PULL-DOWN CLEARANCE

1) Remove air cleaner. Remove choke thermostatic spring housing and heat baffle from carburetor.
2) Fabricate a wire gauge by bending .026" diameter wire at a 90 degree angle approximately 1/8" from one end. Insert the bent end of the wire gauge between choke piston slot and right hand slot in the choke housing. *See Fig. 7.*



Courtesy of American Motors Corp.

Fig. 7: Choke Plate Pull-Down Adjustment

3) Rotate choke piston counterclockwise until gauge is snug in slot. Hold pressure against lever to keep gauge in place.
4) Measure choke plate pull-down specified clearance between lower edge of choke plate and air horn wall.
5) To adjust, bend choke lever. Bend lever toward piston to decrease clearance; bend lever away from piston to increase clearance.

NOTE: Do not distort piston link while adjusting or erratic choke operation will result.

FAST IDLE CAM POSITION

1) Place fast idle speed screw on kickdown step of fast idle cam, against shoulder of highest step.
2) Measure specified clearance between lower edge of choke plate and air horn wall.
3) If clearance is not to specification, adjust by bending fast idle cam link.

ALTITUDE COMPENSATOR

Jeep - 1) Use screwdriver to turn slotted plug out (counterclockwise) until it seats for operation of vehicle at altitudes ABOVE 4000 feet. For operation BELOW 4000 feet, turn slotted plug in (clockwise) until it seats.

Carter YF & YFA 1-Barrel Carburetors (Cont.)

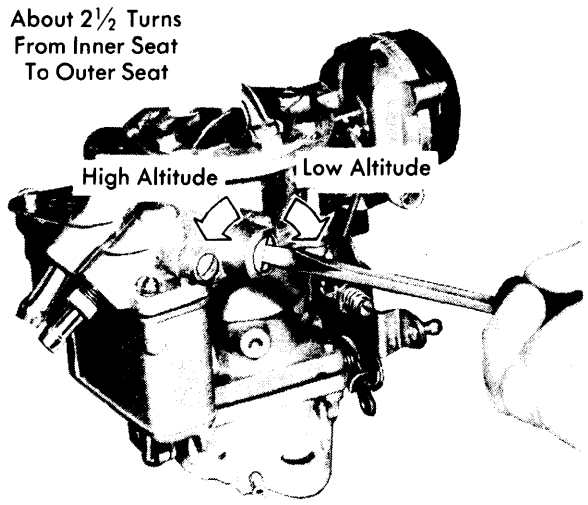


Fig. 8: Jeep (Model YF) High Altitude Compensator

DASHPOT

Ford Motor Co. - 1) Choke should be fully open and throttle lever fully closed. Depress dashpot plunger. The clearance is measured between tip of dashpot plunger and throttle lever. See CARBURETOR ADJUSTMENT SPECIFICATIONS table.
2) Loosen lock nut and turn dashpot in or out on threaded extension until clearance is as specified. Retighten lock nut.

AUTOMATIC CHOKE

NOTE: Although automatic choke is of tamper-proof design, these steps are used if automatic choke is damaged or when carburetor is rebuilt.

Loosen choke thermostat cover. Remove 2 rivets and retaining screw. Rotate cover assembly in "Rich" or "Lean" direction to align reference mark on cover with specified scale graduation on housing. Install new rivets and screw, and tighten.

OVERHAUL

CARBURETOR

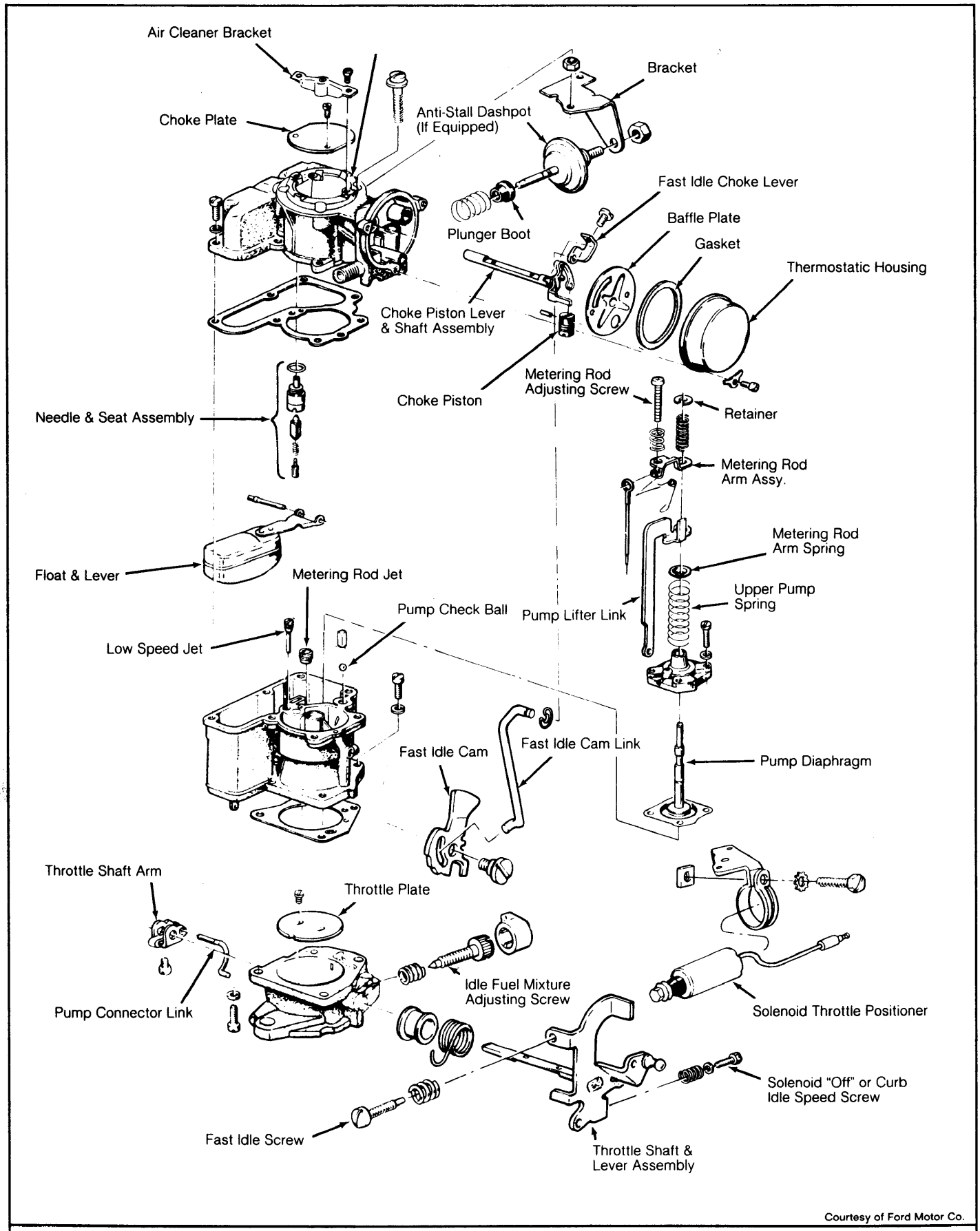
NOTE: Use new gaskets and seals. Make sure that new gaskets fit correctly and that all holes and slots are punched through and correctly located.

Disassembly - 1) Remove carburetor from engine. Remove thermostatic spring housing assembly, spring housing gasket, locking and indexing plate, and fast idle link and bushings.
2) Remove A/C solenoid, if equipped, and bracket. Remove throttle control device.
3) Remove 2 screws disconnecting choke pull-down link. Remove pull-down motor assembly. Disengage link from choke shaft lever.
4) On all carburetors, remove fuel filler inlet. Remove air horn assembly attaching screws, solevac or solenoid, air horn assembly and gasket.
5) Remove wire clip retaining the link that joins the fast idle choke lever to fast idle cam and remove link.
6) On all carburetors, turn air horn upside-down and remove float pin, float and lever assembly.
7) Turn air horn right-side-up and catch needle pin, spring and needle as they fall out. Remove needle seat and gasket.
8) Remove choke plate attaching screws. If necessary, file staked (burred) ends of choke plate attaching screws and remove. Be sure to use new screws when assembling.
9) On all carburetors, remove spring retainer from mechanical fuel bowl vent flapper valve. Remove vent shaft rod and spring and flapper valve. Note position of spring on rod for reassembly.
10) Turn main body upside-down and catch accelerator pump check ball and weight. Remove bowl vent lever screw in end of throttle shaft. Remove spring washer, vent rod, actuating lever and clip.
11) Loosen throttle shaft arm screw. Remove arm and accelerator pump connector link. Remove fast idle cam and screw.
12) Remove accelerator pump diaphragm housing screws and pump transfer tube. Lift out pump diaphragm assembly, pump lifter link and metering rod as a unit. Remove lifter link seal.
13) Disengage metering rod arm spring from metering rod. Remove metering rod from rod arm assembly. For reassembly, be sure to note location of any washers that were used for shimming either spring.
14) Compress upper pump spring and remove spring retainer. Remove upper spring, metering rod arm assembly, and pump lifter link from pump diaphragm shaft.
15) Compress pump diaphragm spring. Remove pump diaphragm spring retainer, spring and pump diaphragm assembly from pump diaphragm housing.
16) On all carburetors, use proper size jet tool or screwdriver to remove metering rod jet and low speed jet. Remove screws and separate throttle body flange assembly from main body casting. Remove gasket.
17) Remove throttle plate retaining screws. File staked (burred) ends if necessary, and use new screws at reassembly. Slide throttle shaft and lever assembly out of throttle body. Note location of torsion spring ends on throttle shaft for reassembly.
18) Remove idle mixture screw adjustment limiting cap and cup as follows: Invert carburetor assembly and tape all vacuum and fuel connection openings.
19) Using a hacksaw, saw a slot lengthwise through thickness of cup. Be careful not to touch throttle body with saw blade. Insert screwdriver in new slot, spreading outer cup enough to remove inner cap.
20) After removing limiter cap, count number of turns to lightly seat needle for reassembly reference. Remove screw and cup. Clean metal shavings from carburetor and remove tape from openings.

Cleaning & Inspection - 1) Do not immerse air horn in any solvent. Damage to vent shaft seal could result. Use a regular carburetor cleaning solution. Soak components long enough to thoroughly clean all surfaces and passages of foreign matter.
2) Do not soak any components containing rubber or leather. Remove any residue after cleaning by rinsing components in solvent. Blow out all passages with compressed air.

Reassembly - 1) To reassemble carburetor, reverse disassembly procedures. Use new gaskets. Make sure that new gaskets fit correctly and that all holes and slots are punched through and correctly located.
2) If throttle valve was removed, make sure notch in throttle valve is aligned with idle port in body flange. Make sure throttle plate does not bind or stick. Restake or peen throttle plate screws.
3) Make sure vacuum passage in accelerator pump housing is aligned with vacuum passage in main body.
4) Make sure bowl vent rod engages forked actuating lever when air horn is installed.

1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors (Cont.)



Courtesy of Ford Motor Co.

Fig. 9: Exploded View of Carter Model YFA & YFA 1-Barrel Carburetor

1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors (Cont.)

1975 CARBURETOR ADJUSTMENT SPECIFICATIONS

Carter Carb. No.	Idle Speed (Engine RPM)		Fast Idle Cam Position	Float Level Setting	Float Drop Setting	Choke Pull-Down Setting	Unloader Setting	Dash Pot Setting	Auto. Choke Setting
	Hot	Fast							
Jeep All Models	①	1600	.190″	.476″	1.38″	.215″	.275″	.075″	1NR
Ford Mtr.									
D5TE-ADA	①	①	.110″	3/8″	.....	.290″	.280″	.....	Index
D5TE-AKA	①	①	.110″	3/8″	.....	.290″	.280″	.....	Index
D5TE-ALA	①	①	.110″	3/8″	.....	.290″	.280″	.....	Index
D5TE-APA	①	①	.110″	3/8″	.....	.290″	.280″	.....	Index
D5TE-AGA	①	①	.110″	3/8″	.....	.290″	.280″	.....	Index
D5TE-AMA	①	①	.110″	3/8″	.....	.230″	.280″	.....	1NR
D5TE-ANA	①	①	.110″	3/8″	.....	.230″	.280″	.....	1NR
D4TE-AGA	①	①	.....	3/8″	.....	.....	.....	.....	Manual
D4TE-AUA	①	①	.....	3/8″	.....	.....	.....	.....	Manual
D4TE-AFA	①	①	.....	3/8″	.....	.....	.....	.....	Manual

① — See engine compartment Emission Control Tune-Up Decal.

1976 CARBURETOR ADJUSTMENT SPECIFICATIONS

Carter Carb. No.	Idle Speed (Engine RPM)		Fast Idle Cam Position	Float Level Setting	Float Drop Setting	Unloader Setting	Choke Pull-Down Setting	Dashpot Setting	Auto. Choke Setting
	Hot	Fast							
Jeep All Models	①	1600	.195″	.476″	1.375″	.275″	.215″	.075″	1NR②
Ford									
D4TE-AGA	①	①	③	3/8″	.....	③	③	.....	③
D4TE-AUA	①	①	③	3/8″	.....	③	③	.....	③
D5TE-ADA	①	.110″	3/8″	.....	.....	.240″	.....	.....	Index
D5TE-ADB	①	①	.110″	23/32″	.....	.280″	.290″	.....	Index
D5TE-AFA	①	①	③	3/8″	.....	③	③	.....	③
D5TE-AGA	①	①	.110″	3/8″	.....	.280″	.230″	.....	1NR
D5TE-AKA	①	①	.110″	3/8″	.....	.280″	.290″	.....	Index
D5TE-AKB	①	①	.110″	23/32″	.....	.290″	.....	.....	Index
D5TE-AMA	①	①	.110″	3/8″	.....	.290″	.....	.....	1NR
D5TE-ANA	①	①	.110″	3/8″	.....	.280″	.290″	.....	1NR
D5TE-APA	①	①	.....	.....	.....	.....	.....	.....	.....
D5TE-CBA	①	①	.110″	23/32″	.....	.280″	.290″	.....	Index
D5UE-EA	①	①	.110″	3/8″	.....	.280″	.290″	.....	Index
D5UE-FA	①	①	.110″	3/8″	.....	.280″	.290″	.....	Index
D5UE-HB	①	①	.110″	23/32″	.....	.280″	.290″	.....	Index
D6TE-DA	①	①	.....	.....	.....	.....	.....	.....	.....

① — See Exhaust Emission Control Tune-Up Decal.
② — 2 notches rich on CJ5 and CJ7 models with man. trans.
③ — Manual choke.

1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors (Cont.)

1977 CARBURETOR ADJUSTMENT SPECIFICATIONS

Carter Carb. No.	Idle Speed (Engine RPM)		Fast Idle Cam Position	Float Level Setting	Float Drop Setting	Unloader Setting	Choke Pull-Down Setting	Dashpot Setting	Auto. Choke Setting
	Hot	Fast							
JEEP									
7110	①	1600②	.201″	.476″	1.375″	.275″	.221″	.....	2 NR
7111	①	1800②	.201″	.476″	1.375″	.275″	.221″	.....	2 NR
7151	①	1600②	.195″	.476″	1.375″	.275″	.215″	.....	1 NR
7153	①	1600②	.195″	.476″	1.375″	.275″	.215″	.....	Index
7154	①	1600②	.195″	.476″	1.375″	.275″	.215″	.....	1 NR
FORD									
D5TE-AGA	①	①	.109″	.781″	1.500″	.313″	.290″	.078″	Index
D5TE-AGB	①	①	.109″	.781″	1.500″	.313″	.290″	.078″	Index
D7TE-CAA	①	1500	.110″	.375″	1.250″	.280″	.290″	.....	1 Rich
D7TE-CDA	①	①	.140″	.781″	1.500″	.280″	.290″	.078″	Index
D7TE-CEA	①	①	.140″	.781″	1.500″	.280″	.290″	.078″	Index
D7TE-CFA	①	①	.140″	.781″	1.500″	.280″	.290″	.078″	Index
D7TE-MA	①	①	.110″	.781″	1.500″	.280″	.290″	.078″	Index
D7TE-PA	①	①	.110″	.781″	1.500″	.280″	.290″	.078″	Index

① — See Emission Control Tune-Up Decal

② — 2nd step of fast idle cam; engine hot with TCS solenoid and EGR disconnected

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS

Carb. No.	Idle Speed (Engine RPM)		Fast Idle Cam Setting	Float Level Setting	Float Drop Setting	Choke Pulldown Setting	Unloader Setting	Dashpot Setting	Auto. Choke Setting
	Hot	Fast							
Ford									
D8UE-AAA	①	①	.140″	.781″	1.594″	.280″	.230″	.070″	Index
D8UE-ZA	①	①	.140″	.781″	1.594″	.280″	.230″	.070″	Index
D8TE-BWA	①	①	.140″	.781″	1.594″	.280″	.230″	.070″	Index
D8TE-CNA	①	①	.140″	.781″	1.594″	.280″	.230″	.070″	Index
D8TE-AAA	①	①	.110″	.719″	1.500″	.280″	.230″	.....	1 NR
D8TE-BVA	①	①	.140″	.781″	1.594″	.280″	.230″	.....	Index
D8TE-CKB	①	①	.140″	.781″	1.594″	.280″	.230″	.070″	Index
D8TE-BUA	①	①	.140″	.781″	1.594″	.280″	.230″	.070″	Index
Jeep									
7201	①	1600②	.195″	.476″	1.375″	.275″	.215″	.....	Index
7228	①	1600②	.195″	.476″	1.375″	.275″	.215″	.....	1 NR
7230	①	1500②	.195″	.476″	1.375″	.275″	.215″	.....	1 NR
7231	①	1500②	.201″	.476″	1.375″	.275″	.221″	.....	2 NR

① — See Emission Control Tune-up Decal.

② — 2nd step of fast idle cam; engine hot with TCS solenoid and EGR disconnected.

1975-79 FUEL SYSTEMS
Carter YF & YFA 1-Barrel Carburetors (Cont.)

1979 CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Float Drop Setting	Float Level Setting	Choke Unloader Setting	Choke Pull-Down Setting	Fast Idle Cam Setting	Auto. Choke Setting
Ford						
D9TE-CA	①	11/16"	.280"	.290"	.140"	Index
D9TE-KA	①	11/16"	.280"	.230"	.140"	Index
D9TE-LA	①	11/16"	.280"	.230"	.140"	Index
D9TE-MA	①	11/16"	.280"	.230"	.140"	Index
D9TE-NA	①	11/16"	.280"	.280"	.140"	Index
D9TE-VA	①	11/16"	.280"	.290"	.140"	Index
D9TE-ZB	①	11/16"	.280"	.230"	.140"	Index
D9UE-FA	①	11/16"	.280"	.230"	.140"	Index

① — Not available from manufacturer at time of publication.