1970-72 CARTER RBS 1-BARREL

FORD, FAIRLANE, MAVERICK & MONTEGO (1970)

	Ford Carburetor No. Man. Trans.	Auto. Trans.
250" 6 Cyl.	DOZF-C	
Without A/C		DOZF-F
With A/C		DOZF-D

JEEP "J" SERIES (1970)

	Carter Carburetor No.
232" 6 Cyl. (Manual Choke)	4925S
(Auto. Choke)	4926S

MUSTANG, COMET, TORINO, MAVERICK & MONTEGO (1971)

	Ford Carburetor No. Man. Trans.	Auto. Trans.
250" 6 Cyl. (Exc. Calif.)	DIZF-HA	DIZF-JA, KA
With A/C		DIZF-KA
250" 6 Cyl. (Calif.)	DIZF-LA	DIZF-MA, NA
With A/C		DIZF-NA

JEEP "J" SERIES (1971)

	Carter Carburetor No.
232" 6 Cyl.	4926S

MUSTANG, COMET, TORINO, MAVERICK & MONTEGO (1972)

	Ford Carburetor No. Man. Trans.	Auto. Trans.
250" 6 Cyl. (Exc. Calif.)	D20F-LA	D20F-MA
250" 6 Cyl. (Calif.)		D20F-SA

CARBURETOR IDENTIFICATION

Carter or Ford number stamped on metal tag attached to air horn. Lower line of characters and digits on tag designates design or production changes and production date information. The metal tag may be stamped Ford, Autolite or Motorcraft.

DESCRIPTION

Single venturi design with aluminum body casting and pressed steel fuel bowl. Two internal vapor vents provide for fuel vapor dissipation. Metering rod is diaphragm controlled, accelerating pump is spring actuated, and the integral automatic choke has a vacuum piston in the thermostatic spring chamber. A solenoid throttle-positioner is used on some Ford carburetors to adjust curb idle speed. See Idle speed and mixture adjustment.

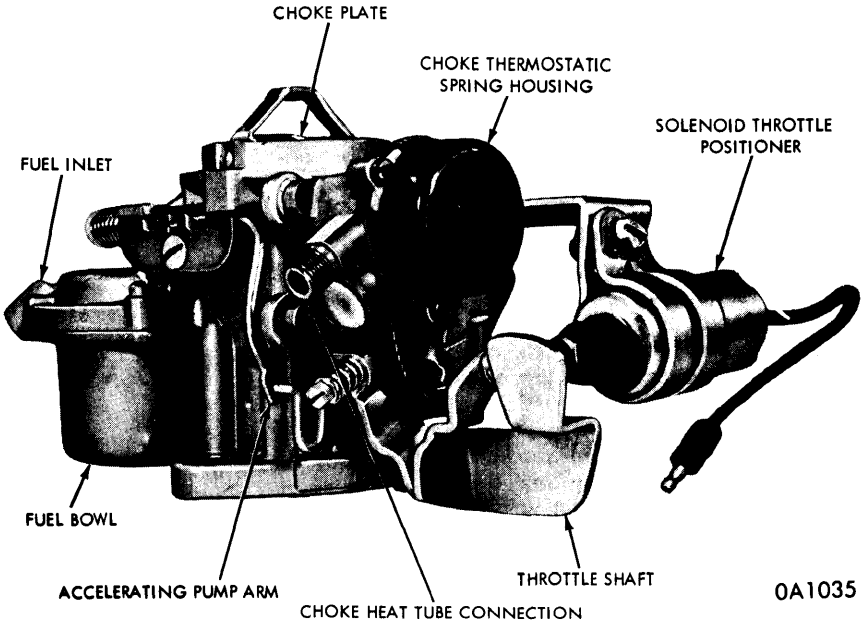
Idle Limiter Cap (All Carburetors) – Plastic cap and boss on carburetor body limits adjustment travel of mixture screw. *NOTE – Satisfactory idle should be obtainable within range of idle limiter adjustment if all other engine systems are operating within specifications.*

ADJUSTMENT

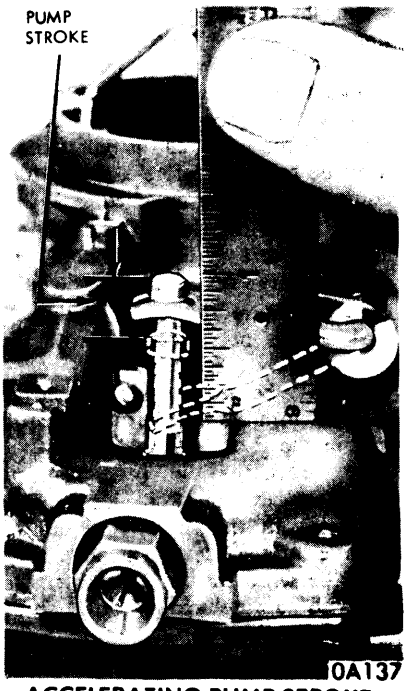
Idle Speed & Mixture

Adjust with engine at normal operating temperature (choke valve wide open and fast idle not operative), air cleaner installed, automatic transmission in Drive (Ford), all transmissions in Neutral (Jeep), and air conditioner OFF. On Ford models, turn headlights ON (high beam position).

Ford Motor Co. Models – With engine idling and throttle positioner energized (where used), adjust idle speed to specified RPM by turning throttle positioner adjusting screw (or throttle stopscrew on cars without throttle



RBS CARBURETOR (WITH SOLENOID)



ACCELERATING PUMP STROKE

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positioner). Starting from full rich counterclockwise position of idle mixture screw, turn screw clockwise (inward) for smoothest possible idling performance within range of idle limiter. Recheck idle speed and idle smoothness with air cleaner installed. On cars with throttle positioner, disconnect solenoid lead (at bullet connector) and adjust throttle stopscrew for specified lower idling speed. Reconnect solenoid lead, open throttle slightly by hand and note that solenoid plunger follows throttle lever to provide specified higher idle speed. *NOTE – If satisfactory idle performance cannot be obtained within range of idle limiter cap, and all other tune-up adjustments are correct, idle limiter cap can be removed and idle mixture screw readjusted. This requires use of Exhaust Analyzer.*

Jeep Models – With engine idling, adjust idle speed to specified RPM by turning throttle stopscrew. Starting from full rich counterclockwise position of idle mixture screw, turn screw clockwise for best idling performance which will ensure "lean as possible" mixture adjustment. Recheck idle speed.

FAST IDLE (1970)

Determined by fast idle linkage setting and throttle valve setting. *NOTE – Carburetor must be removed from engine to check or adjust fast idle speed throttle valve clearance.*

Fast Idle Linkage Adjustment – With choke valve fully closed, align fast idle tang on throttle lever with index mark of fast idle cam. Bend choke connector rod at offset portion as required to position connector rod end at top end of slot in fast idle cam.

Throttle Valve Clearance – With fast idle tang on throttle lever aligned with index mark on fast idle cam, insert rod of proper size (see table below) between throttle valve and throttle bore on idle port side to check clearance. To adjust, bend tang on throttle lever.

Carburetor	Throttle Valve Clearance
Ford DOZF-C	.040"
DOZF-D	.046"
DOZF-F	.046"
Jeep 4925S	.052"
4926S	.035"

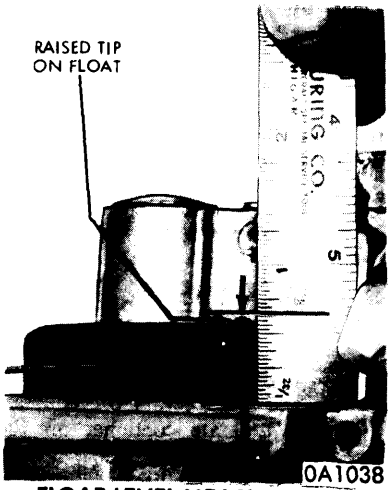
FAST IDLE (1971-72)

Ford Motor Co. – With engine at normal operating temperature, and with air cleaner removed, position fast idle adjusting screw on Kick-down step of fast idle cam, check engine fast idle RPM (see specifications). Adjust by turning fast idle speed screw in or out as required.

Jeep Models – With engine at normal operating temperature, position throttle lever fast idle tang on fast idle cam in line with index mark on cam, check engine fast idle RPM (see Specifications). Adjust by bending fast idle tang as required.

Float Level

With carburetor assembly inverted (bowl and bowl gasket removed) and with only the weight of the float resting on inlet needle, measure the vertical distance from the main body casting surface for the fuel bowl to the raised tips on the outer side of float. Measure for specified setting at both ends of float, equalize the measurement, if necessary by holding float lever securely at the narrow portion with needle-nose pliers and twisting the float as required. While holding tab, float may be adjusted to specification. *NOTE – Hold tab of float lever away from inlet needle during adjustment.*



FLOAT LEVEL MEASUREMENT

Accelerating Pump

Ford Models 1) – Back off idle speed adjusting screw, open choke valve, seat throttle valve in bore.

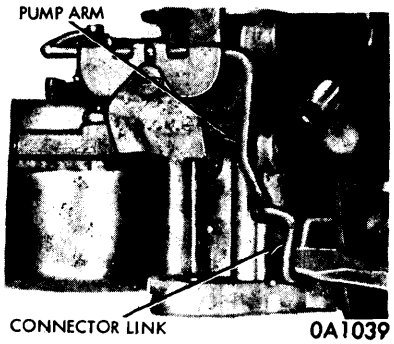
2) Measure distance or height from flat surface of main body casting to top of pump stem. Open throttle wide and again measure height. Pump stroke (see *Specifications*) is difference between two measurements.

3) To adjust stroke, open or close pump connector link at offset portion.

Jeep Models – Back off idle speed adjusting screw and make certain throttle valve fully seated in bore. Measure clearance between flat washer on accelerating pump piston stem and boss on bowl cover. If clearance not correct, adjust by turning self-locking nut at throttle lever end of pump connector rod in or out as required.

Choke Valve Pulldown (Ford Motor Co)

Bend a .026" wire gauge 90° approximately 1/8" from its end. Open choke valve and place gauge so bent portion is



PUMP STROKE ADJUSTMENT

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between top of slot in choke piston cylinder and bottom of slot in piston. While holding wire gauge in place, close choke valve by pressing piston lever in choke housing counterclockwise until gauge is snug in piston slot. While exerting light pressure on piston lever to hold gauge in place, measure clearance between lower edge of choke valve and air horn wall using correct size drill rod (see Specifications). If clearance not correct adjust by bending choke piston lever as required. *CAUTION - Remove piston lever for bending - use care not to distort piston link.*

FAST IDLE CAM LINKAGE (1970) (OFF ENGINE)

All Carb. – With choke valve fully closed, fast idle tang on throttle lever should be aligned with index mark on fast idle cam. To adjust, bend fast idle cam connector at offset.

FAST IDLE CAM LINKAGE (1971-72) (OFF ENGINE)

Ford Motor Co. – Position fast idle screw on kick-down step of fast idle cam and against shoulder of high step, close choke valve as far as possible, measure clearance between lower edge of choke valve and air horn wall. If clearance not correct (see specifications below), adjust by bending connector rod between choke lever and fast idle cam as required.

Car & Carb.	Fast Idle Cam Linkage Setting
Ford Motor Co. (All Carbs.)	.115" ± .015"

Jeep Model 4925S – With choke valve wide open and throttle valve tightly closed, adjust nut on end of choke connector rod to align index mark on fast idle cam with fast idle tang on throttle lever.

Jeep Model 4926S – With choke valve tightly closed and fast idle connector rod at upper end of slot in fast idle cam, index mark on cam should be aligned with center of fast idle tang on throttle lever. Adjust by bending connector rod at lower angle as required.

CHOKE PULL DOWN ADJUSTMENT

CARBURETOR ADJUSTMENT SPECIFICATIONS

Carb. No.	Idle Speed (Engine RPM)		Float Level Setting	Accel. Pump Setting③	Choke Pulldown ③	Unloader Setting	Auto. Choke Setting	Dashpot Setting
	Hot①②	Fast③						
D0ZF-C	750/500	.....	9/16"	.400"	.190"	9/32"	Index	.....
D0ZF-D	600/500	.....	9/16"	.400"	.190"	9/32"	1-Rich	.....
D0ZF-F	550	.....	9/16"	.400"	.190"	9/32"	1-Rich	7/32"
D1ZF-HA	750/500	1600	9/16"	.400"	.270"	.250"	Index	.....
D1ZF-JA	550	1600	9/16"	.400"	.190"	.250"	1-Rich	.100"
D1ZF-KA	600/500	1600	9/16"	.400"	.190"	.250"	1-Rich	.....
D1ZF-LA	750/500	1600	9/16"	.400"	.270"	.250"	Index	.....
D1ZF-MA	550	1600	9/16"	.400"	.190"	.250"	1-Rich	.100"
D1ZF-NA	600/500	1600	9/16"	.400"	.190"	.250"	1-Rich	.....
D2OF-LA	750/500	1600	9/16"	.400"	.300"	.250"	Index	.....
D2OF-MA	600/500	1600	9/16"	.400"	.190"	.250"	1-Rich	.....
D2OF-NA	600/500	1600	9/16"	.400"	.190"	.250"	1-Rich	.....
4925S	700/650	1800	21/32"	.005-.015"	.....	.....	.....	5/32-1/8"
4926S	700/650	1800	21/32"	.005-.015"	.....	.125"	1-Rich	5/32-1/8"

① – On Ford, set with Auto. Trans. in "D", Lights ON high beam, A/C OFF. On Jeep, all transmission in "N".
③ – Higher RPM, solenoid energized. Lower RPM, solenoid de-energized.
④ – See text for procedure.

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Fast Idle Throttle Valve Clearance (Off Engine)

Jeep Models – With choke valve closed, align fast idle tang on throttle lever with index mark on fast idle cam. Check clearance between edge of throttle valve and carburetor bore on idle port side. If clearance not correct (see specifications below), adjust by bending fast idle tang as necessary.

Fast Idle Throttle Valve Setting

Car & Carb.	Throttle Valve Clearance
Jeep 4926S	.035"

Anti-Stall Dashpot (If Equipped)

With engine at normal operating temperature and engine idle speed set to specification, proceed as follows:

1) Loosen locknut on dashpot, hold throttle closed, and depress dashpot plunger with screwdriver blade until it bottoms. Turn dashpot in or out of bracket for correct clearance between end of plunger and throttle lever (see Specifications), tighten locknut.

Automatic Choke

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

Unloader

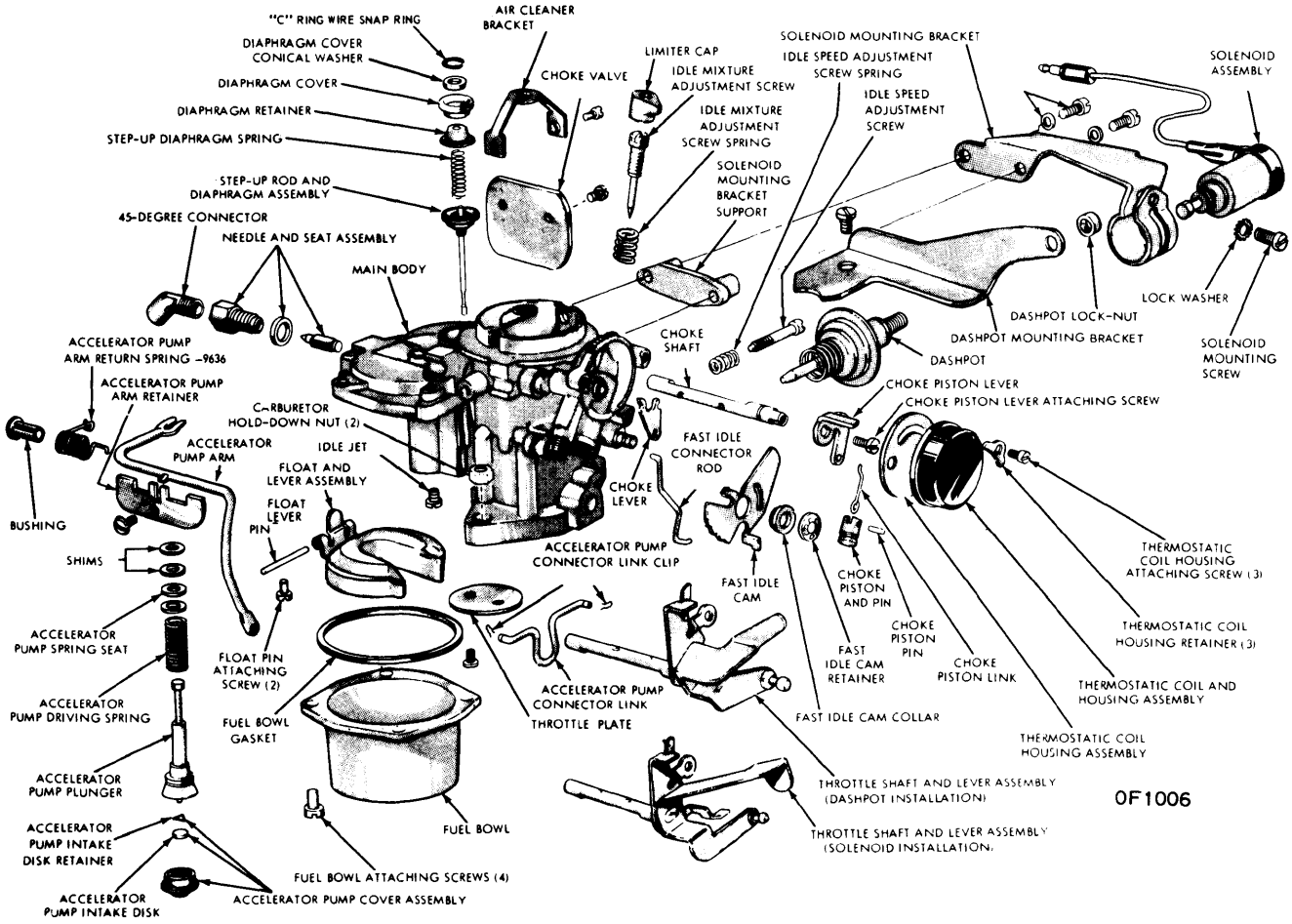
Hold throttle lever at wide open position and close choke plate as far as possible without using extreme force. Check clearance between lower edge of choke plate and inner wall of main body. To adjust, bend tang on throttle lever (see specifications).

OVERHAUL

Disassembly

1) Remove anti-stall dashpot or throttle positioner solenoid and bracket as an assembly (when used). Remove automatic choke cover and coil assembly and gasket. Remove choke piston lever screw from end of choke shaft, remove piston lever, choke piston and link as an assembly. Remove air cleaner anchor screw bracket from air horn.

2) Remove fork lever from choke shaft, remove staking and take out choke valve screws, remove valve and slide choke shaft out.



CARTER RBS SINGLE BARREL CARBURETOR ASSEMBLY

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3) Remove fast idle cam retainer and plastic collar, remove cam and disengage connector rod from cam and choke shaft fork lever. Remove pump arm connector link, free retaining spring from pump arm at plunger end, remove pump arm retainer screw and retainer, then remove pump arm, spring, and plastic sleeve.

4) Take out fuel bowl attaching screws, remove bowl and gasket. Remove float pin attaching screws, remove float pin, float, fuel inlet needle valve and seat assembly.

5) Use a light hammer to tap down on upper end of pump plunger shaft to remove cover on lower face of casting, *CAUTION – Pump plunger and spring will drop out with cover.*

6) Remove snap ring and pry conical washer out of upper end of step-up metering rod diaphragm housing, pierce diaphragm cover with a sharp pointed tool and pry cover out, remove diaphragm retainer, spring, and diaphragm and step-up metering rod assembly.

7) If necessary to remove throttle valve or shaft, scribe throttle plate and lower face of mounting flange lightly for correct installation, remove staking from throttle valve screws with a file, remove screws, lift out valve and slide throttle shaft and lever assembly out.

8) Remove (plastic) idle limiter cap, being certain to note position of tab. After removing limiter cap, count the number of turns necessary to lightly seat needle (this will aid in reassembly). Remove idle mixture screw and spring, fast idle speed screw and spring, and idle speed screw and spring. *CAUTION – Do not disturb or attempt to remove slotted idle passage plug, located directly below idle mixture adjusting screw, as this screw is pressed in and any change in position will affect idle performance.*

Cleaning & Inspection

Wash all parts except pump diaphragm, power valve, step-up rod diaphragm, dashpot and throttle positioner solenoid in clean carburetor solvent, rinse in kerosene and dry with compressed air. Wipe all parts which can not be immersed in solvent with clean cloth. Blow out all passages with air. Check all parts for wear or damage.

Reassembly

Use all new gaskets, reassemble carburetor by reversing disassembly procedure while noting the following:

Accelerating Pump Assembly – Install pump plunger with spring, spring seat, and shims in carburetor body. Install new cover on bottom of body, use a 5/8" socket to press on outer edge of cover and tap with light hammer to seat cover on bottom of carburetor body.

Step-Up Metering Rod & Diaphragm Assembly – Install idle jet in main body. Insert metering rod in sleeve in casting and drop into place in main body, position diaphragm spring and retainer over diaphragm. Install new diaphragm cover. Use 1/2" socket and light hammer to seat diaphragm cover in casting. Install new conical washer over diaphragm cover and use a 7/16" socket and light hammer to tap washer down until it is flat in main body.

Throttle Valve Installation – Install valve on shaft with scribe marks (made during disassembly) aligned, install valve screw just snug. Close valve and check alignment by holding main body up to light – little or no light should show around valve. Tap valve lightly to seat it and hold valve closed while tightening screws securely. Stake attaching screws while supporting shaft with a metal bar or block of wood.

Choke Valve Installation – Center choke valve in same manner as throttle valve (above) while tightening screws.

Idle Mixture Adjusting Screw & Limiter Cap – Install adjusting screw and spring, but do not install limiter cap until after carburetor has been installed on engine and idle mixture adjusted.

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