

Carter Carburetors

1968-69 CARTER WCD 2-BARREL

AMERICAN MOTORS

Carter Carburetor No.

1968

Application	Man. Trans.	Auto. Trans.
232" 6 Cyl. (Optl.).....	4410S.....	4537S

1969

232" 6 Cyl.....	4667S.....	4668S
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► CHANGES, CAUTIONS, CORRECTIONS

► **232" 6 CYL. ENGINE NOTE** – Engine has "Engine Mod" system with "low quench" combustion chamber and closed-positive crankcase ventilation system. Carburetors and distributors are special emission calibrated units.

CARBURETOR IDENTIFICATION

Carter carburetor number is stamped on tag attached to carburetor by one air horn attaching screw.

DESCRIPTION

Dual downdraft carburetors of same design used on previous models.

ADJUSTMENT

Idle Speed & Mixture

Adjust with engine at normal operating temperature (choke valve wide open and fast idle not operative), air cleaner in place, automatic transmission in Drive, and air conditioner OFF.

1968 Carburetors – With engine idling, set idle speed to 50 RPM less than specified speed (see *Specifications*), turn both idle mixture adjusting screws out equally (counterclockwise) until engine speed begins to drop off, then turn screws in (clockwise) to lean mixture until maximum engine speed is obtained and continue to turn screws in until engine speed begins to drop off. Finally turn screws out until maximum speed is just regained (this will assure a "lean as possible" setting). Readjust idle speed to specifications.

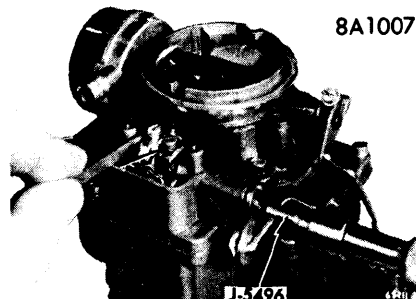
1969 Carburetors – With engine idling, adjust idle speed to specified RPM. Starting from full rich stop, turn idle mixture screw clockwise until a loss of engine RPM is indicated. Turn mixture screw counterclockwise until highest RPM is obtained at "lean best idle" setting.

Fast Idle Speed (On Engine)

With engine idling at normal operating temperature, position fast idle adjusting screw on high step of fast idle cam, adjust fast idle screw for correct engine fast idle speed (see *Specifications*).

Accelerating Pump

With pump connector link installed in outer hole (long stroke) of pump arm (under dust cover on bowl cover) back off throttle stopscrew so that throttle valves are fully closed. Place a straightedge across dust cover boss directly above pump arm. Flat on pump arm should be parallel to straightedge. To adjust, bend throttle connector rod at upper angle.

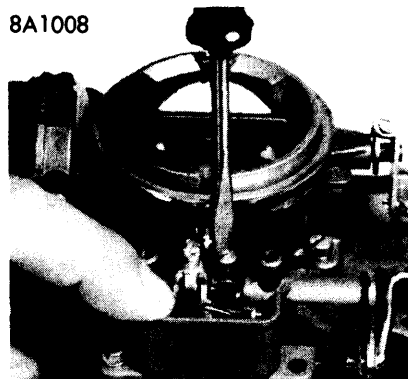


ACCELERATING PUMP ADJUSTMENT

Metering Rods

NOTE - Check and adjust metering rods after Accelerating Pump adjustment is completed. With throttle stopscrew backed off and throttle valves fully closed, loosen metering rod arm clampscrew (on countershaft under dust cover on bowl cover). Press down on vacuumeter link until both metering rods just bottom in carburetor casting, then rotate metering rod arm until finger on arm contacts lip on vacuumeter link and tighten clampscrew. **CAUTION** - Do not disturb arm position.

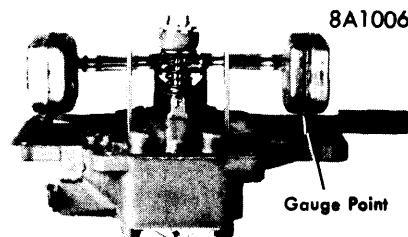
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METERING ROD ADJUSTMENT

Float Level

FLOAT LEVEL SETTING CAUTION - When bending float level to adjust height on carburetors with resilient inlet valve seat, do not allow float lever to contact needle as seat can be compressed enough to cause a false setting. Two separate adjustments required:



FLOAT LEVEL ADJUSTMENT

1968-69 CARTER WCD 2-BARREL (Cont.)

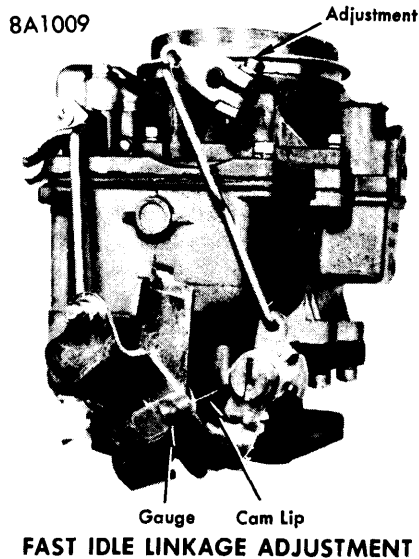
Vertical Adjustment - With bowl cover removed from carburetor, invert assembly, remove cover gasket and install correct gauge (see "Specification Table") on cover directly below floats. Top of each float should just clear horizontal portion of gauge. To adjust, bend float arms so that both floats are uniform height.

Lateral Adjustment - Sides of floats must be parallel with edge of bowl cover casting (check by sighting down side of each float). To adjust, apply pressure to end of float while supporting float lever. **CAUTION** - This adjustment is important to prevent floats hanging up in bowl when floats installed.

Fast Idle (Off Engine)

NOTE - Two adjustments are required as follows:

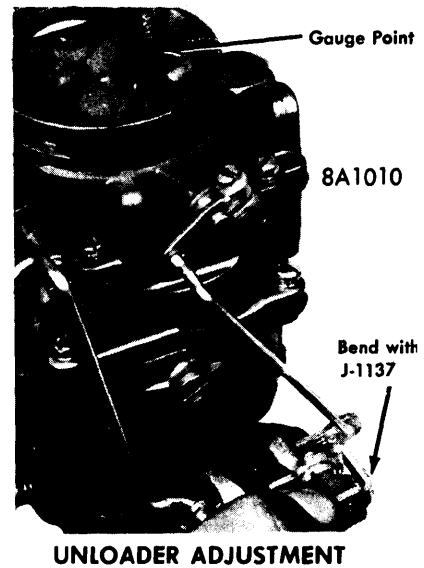
Fast Idle Cam Clearance - Loosen choke lever clamp-screw on choke valve shaft, then insert a gauge of proper thickness (see Specifications Table) between lip on fast idle cam and boss to flange casting. Hold choke valve tightly closed and remove all slack from linkage by pressing choke lever toward closed position, then tighten choke lever clamp-screw.



Fast Idle (Initial Setting) - With choke valve tightly closed, tighten fast idle adjusting screw until throttle valve opening (clearance between edge of valve and carburetor bore on side opposite idle ports) is as indicated in "Specifications Table."

Unloader

Hold throttle valves wide open and check clearance between edge of choke valve and air horn wall. Clearance should be as indicated in "Specification Table". To adjust, bend unloader lip on throttle valve lever.



Automatic Choke

Loosen choke cover attaching screws and rotate cover to align index mark on cover with proper graduation on choke housing. See "Specification Table"

Dashpot

With carburetor throttle lever set for correct curb idle speed, hold dashpot stem fully depressed and adjust dashpot in bracket (loosen locknut and turn dashpot in or out of bracket) for clearance of 5/64" (.080" gauge on 1968 carbs.) and 7/64" (.110" gauge on 1969 carbs.) between dashpot stem and throttle lever.

CARBURETOR ADJUSTMENT SPECIFICATIONS									
Carter Carb. No.	Idle Speed (Engine RPM)		Initial Idle Mixture	Fast Idle Cam Clearance	(Off. Eng.) Initial Setting ^③	Float Level Setting	Unloader Setting	Dashpot Setting	Auto. Choke Setting
	Hot ^①	Fast ^②							
4410S	600	2000	1 Turn	.010"	.016"	7/32"	3/16"	5/64"	Index
4537S	525	2000	1 Turn	.010"	.022"	7/32"	3/16"	5/64"	Index
4667S	600	2000	④	.010"	7/32"	3/16"	7/64"	Index
4668S	525	2000	④	.010"	7/32"	3/16"	7/64"	Index

① - Auto. Trans. in "D", A/C OFF.

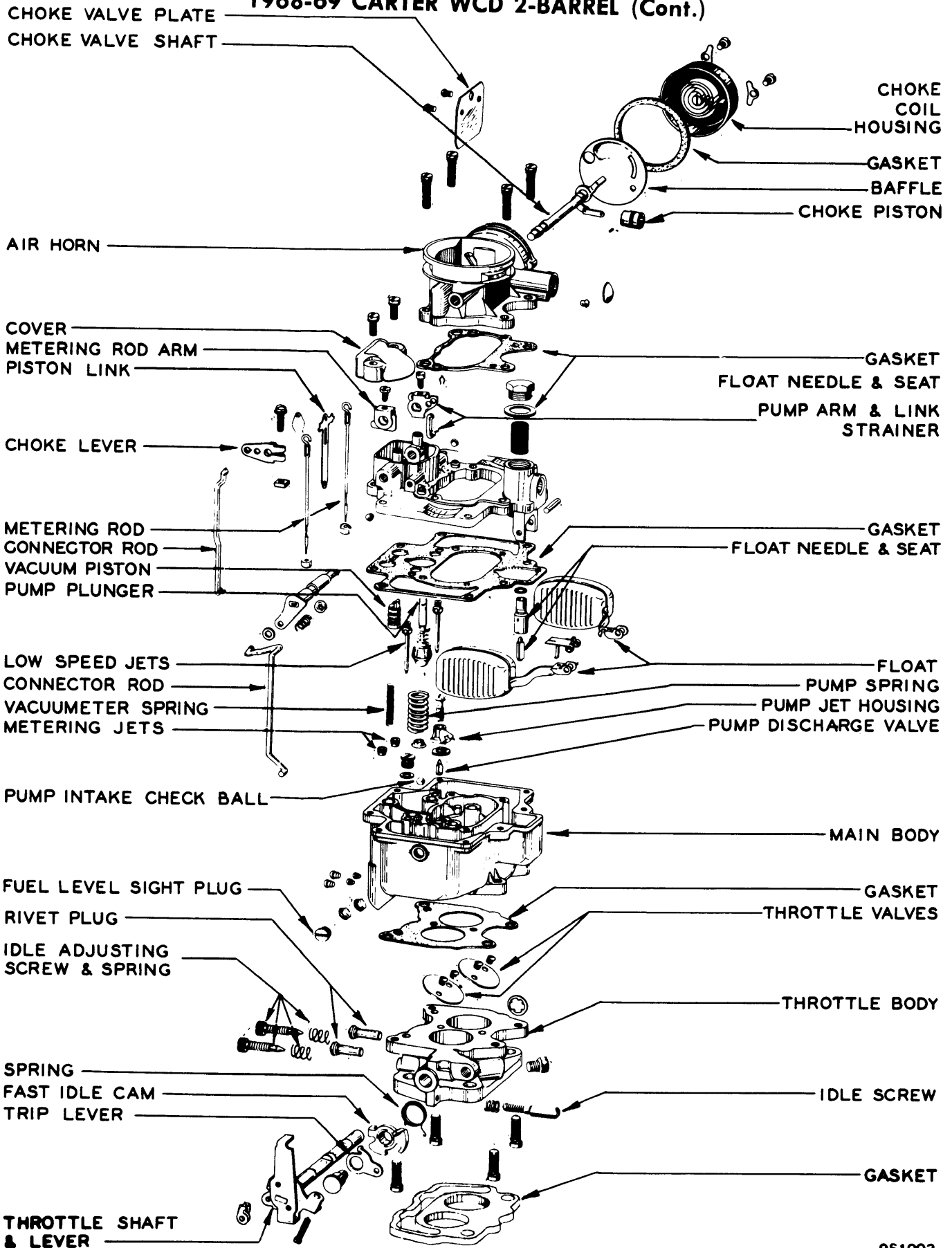
③ - See text for adjustment procedure.

② - Fast idle screw on high step of fast idle cam.

④ - Idle limiter caps used. Initial setting full counterclockwise against stop

Carter Carburetors

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CARTER WCD 2-BARREL CARBURETOR ASSEMBLY

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1968-69 CARTER WCD 2-BARREL (Cont.)

OVERHAUL

Disassembly

1) Remove screws and lift dust cover from bowl cover. Remove bowl cover screws securing dashpot bracket and separate dashpot assembly from cover. Upper and lower throttle connector rod retainers and connector rod can now be removed. Remove lower choke connector rod pin spring retainer and remove choke shaft lever. Remove air horn attaching screws and separate air horn from bowl cover, then remove remaining bowl cover attaching screws and separate cover from bowl.

2) Remove accelerator pump and vacuumeter piston spring, then disconnect and remove throttle body. Remove idle limiter caps from idle mixture screws by installing a sheet metal screw in center of each cap and turning clockwise. Remove idle mixture screws from throttle body. Remove curb idle adjusting screw.

NOTE - It is not necessary to remove throttle valve plates except for parts replacement. To remove throttle valves and shaft, file off staked portion of valve screws and remove screws and valves

3) Remove pump jet and metering rod jets from main body, then remove pump intake check ball retainer and ball and pump discharge needle. Remove vacuumeter piston from bowl cover, then remove float and lever assembly, fuel needle and seat, and bowl cover gasket. Remove metering rods from vacuumeter link and push out through top of bowl cover. Disconnect pump plunger link and slide plunger assembly out of bowl cover.

4) Remove fuel strainer and gasket, then remove both low speed jets. Remove choke cover, gasket and baffle plate. If necessary, remove choke valve plate and choke shaft. **NOTE - Choke piston and choke shaft are removed as a complete assembly.**

Cleaning & Inspection

Clean all metal parts and assemblies in carburetor cleaning solvent. Blow out all passages with compressed air. Make certain that all passage plugs are tight and inspect all parts for wear or other damage. Discard all old gaskets (use new gaskets when reassembling carburetor).

Reassembly

Reverse disassembly procedure and note the following. If throttle valve plates were removed from throttle shaft, slide throttle shaft into throttle body and install valve plates and screws (do not tighten screws). Rotate plates until they are a snug fit in bores, then tighten screws. Check alignment after tightening by holding up to a light. With throttle in closed position, little or no light should pass between plates and bores. Stake throttle valve plate screws and check for binding.

NOTE - Throttle lever stopscrew must be backed off to allow complete closure of throttle plate.

Limiter Cap & Idle Mixture Screw Installation - When installing idle mixture adjustment screws, turn screws until they bottom **lightly**, and back out 1 turn (1968 carbs.) and 1½ turns (1969 carbs.). After final idle mixture adjustment is made on vehicle, install new idle limiter caps.