HOLLEY MODEL 1945 & 1946-1V SINGLE BARREL

CARBURETOR APPLICATION

CHRYSLER CORP.

Application	Chrysler Corp. Carb. No. Man. Trans.	Auto. Trans.
225" 6-Cylinder		
Federal	.....	R9253A

FORD MOTOR CO.

Application	Ford Motor Co. Carb. No. Man. Trans.	Auto. Trans.
200" 6-Cylinder		
Federal		
Without A/C	EOZE-GA	EOBE-AMA
	EOZE-BAA	EOZE-EA
With A/C	EOZE-BBA	EOBE-ALA
	E1BE-AGA	EOZE-DA
Calif.		
Without A/C	.....	EOBE-AAA
		E1BE-DA
With A/C	.....	EOBE-ZA
		E1BE-AFA

CARBURETOR IDENTIFICATION

Part number is stamped in float bowl body or on tag attached to carburetor.

DESCRIPTION

The Holley model 1945 and 1946-1V carburetors are single-barrel downdraft designs. The carburetor consists of 3 main sub-assemblies: air horn, main body and throttle body. Air horn houses choke valve, accelerator pump system, vacuum controlled power enrichment valve piston assembly, choke bimetal assembly and fuel bowl vent assembly.

Main body houses fuel inlet system (float assembly and needle valve), main metering jet, power enrichment valve assembly, accelerator pump check ball and weight and hot idle compensator (if equipped). Throttle body houses throttle valve, linkage and tamper-proof idle mixture adjusting needle.

Major differences are found in external attachments according to manufacturer. On Ford models, a Throttle Solenoid Positioner, cut-off switch and tamper-proof mixture adjustment screws are used.

On Chrysler Corp. models, an electronic bowl vent solenoid is used. This allows fuel vapors to vent to the carbon canister when the ignition is off. With ignition on, the valve is closed and fuel bowl vents internally into air horn.

ADJUSTMENT

HOT (SLOW) IDLE RPM

See appropriate article in TUNE-UP SERVICE PROCEDURES.

IDLE MIXTURE

See appropriate article in TUNE-UP SERVICE PROCEDURES.

COLD (FAST) IDLE RPM

See appropriate article in TUNE-UP SERVICE PROCEDURES.

FLOAT LEVEL

1) With air horn removed, invert main body. Catch accelerator pump check ball and weight if not previously removed. Hold float hinge pin retainer in place with finger. *See Fig. 1.*

2) On Chrysler Corp. models, leave air horn gasket in place. On all models place a straight edge across air horn gasket surface across toes of both floats.

3) To adjust on all models, bent float tang. Make sure floats are correctly aligned with walls of float bowl and that they move freely through full travel.

NOTE – *Make sure accelerator pump check ball and weight are reinstalled if removed.*

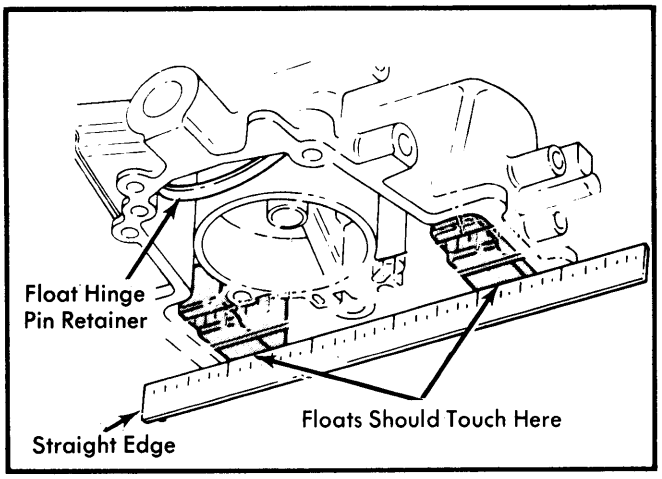

Fig. 1 Adjusting Float Level

ACCELERATOR PUMP

NOTE – *Ford Motor Co. does not recommend changing accelerator pump setting to improve driveability. Accelerator pump is preset at factory and adjustment should only be changed if accelerator pump rod is bent or replaced.*

1) Make sure accelerator pump rod is in correct hole on Chrysler Corp. models or in the correct slot on Ford Motor Co. models. *See Fig. 2.*

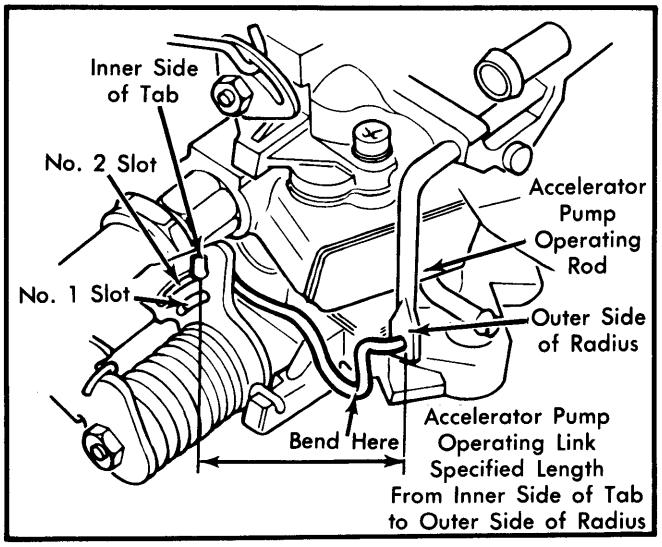

Fig. 2 Adjusting Accelerator Pump

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NOTE – *Inner hole or slot is designated number 1 and outer hole or slot is designated number 2.*

2) Place throttle lever in curb idle position. Measure accelerator pump specified distance between center of rod in throttle lever and center of rod in accelerator pump arm.

3) To adjust to specified dimension, bend existing loop in accelerator pump rod.

NOTE – *If accelerator pump adjustment is made on Chrysler Corp. models, bowl vent adjustment must be performed.*

FAST IDLE CAM POSITION

1) Position fast idle speed screw on second step of fast idle cam against shoulder of highest step. Hold choke valve toward closed position with light finger pressure. See *Fig. 3.*

2) Measure fast idle cam specified clearance between upper edge of choke valve and air horn wall. Measurement can be checked using a specified drill or pin gauge.

3) To adjust, bend fast idle cam rod. On Ford Motor Co. models, rod is located between automatic choke housing. To adjust, bend rod at "U" shaped bend.

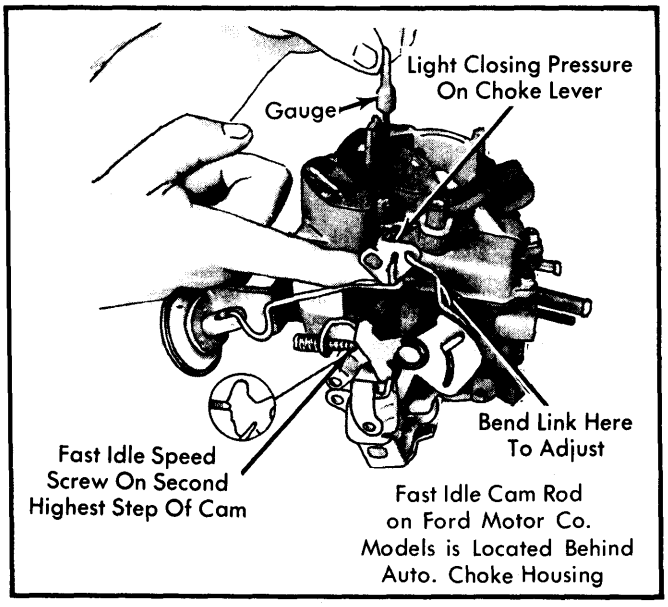

Fig. 3 Adjusting Fast Idle Cam Position (Chrysler Corp. Model Carburetor Shown)

CHOKE UNLOADER

1) Hold throttle valves in wide open position. Hold choke valve toward closed choke position by applying light closing pressure to choke lever. See *Fig. 4.*

2) Measure choke unloader specified clearance between upper edge of choke valve and air horn wall. Measurement can be checked using a specified drill or pin gauge. To adjust, bend choke unloader tang.

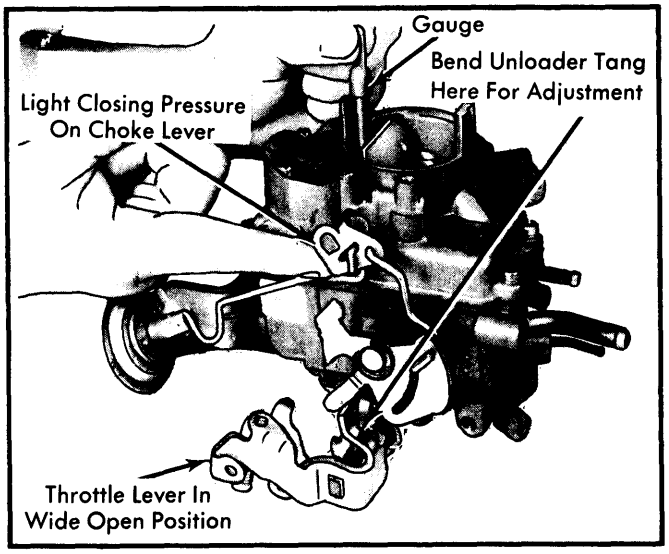

Fig. 4 Adjusting Choke Unloader

CHOKE VACUUM KICK (CHOKE PULLDOWN)

1) On Chrysler Corp. models, open throttle then close choke. Now close throttle to trap fast idle cam at closed choke position. See *Fig. 5.*

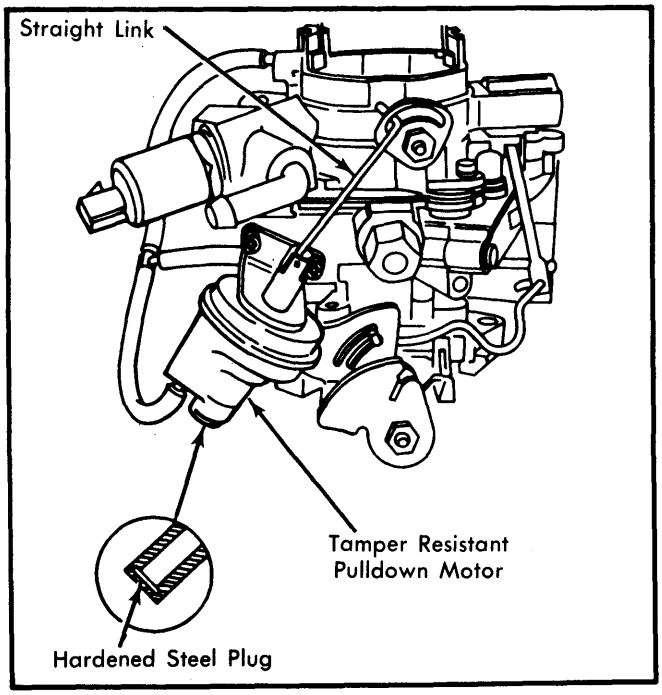

Fig. 5 Adjusting Choke Vacuum Kick (Choke Pulldown)

2) On Ford Motor Co. models, remove choke cover retaining rivets. Rotate choke cover in rich direction to close choke valve, then turn cover an additional 90°. Tighten 1 retaining screw.

3) On Chrysler Corp. models, connect an outside vacuum source of at least 15 in. Hg to choke vacuum diaphragm. Apply enough closing pressure on choke valve to compress spring in choke diaphragm without distorting linkage.

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4) On Ford Motor Co. models, remove tamper-proof steel plug. Apply outside vacuum source to activate pull down motor and measure choke vacuum kick specified clearance between upper edge of choke valve and air horn wall. To adjust, turn adjusting screw in or out as required. On Chrysler Corp. models, bend vacuum diaphragm rod.

BOWL VENT VALVE

NOTE – *On Chrysler Corp. models, this adjustment must be performed if accelerator pump stroke adjustment was changed.*

Chrysler Corp. – 1) Position throttle at curb idle position. Remove bowl vent cover, spring and gasket. Measure bowl vent specified distance from bowl vent cover surface on air horn to flat on plastic bowl vent lever. *See Fig. 6.*

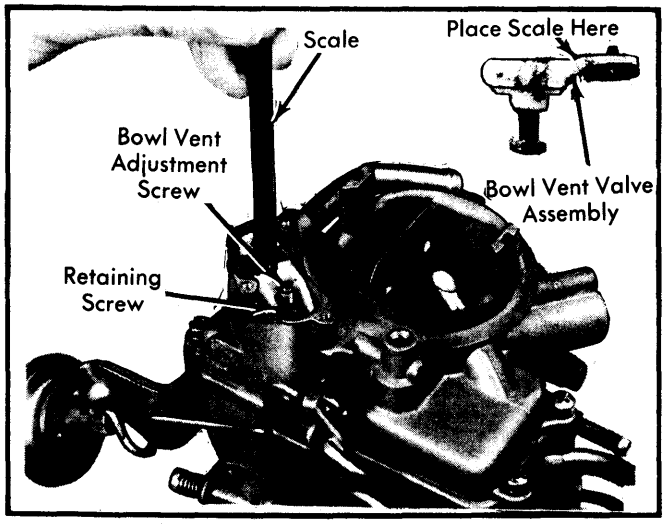

Fig. 6 Adjusting Bowl Vent (Chrysler Corp. Models)

2) To adjust, turn bowl vent adjustment screw with a screwdriver until specified distance is obtained. Install bowl vent cover spring and gasket.

OVERHAUL

DISASSEMBLY

Air Horn – 1) Place carburetor on suitable repair stand to prevent damage to throttle valves and linkage.

2) Remove choke cover assembly (Ford).

3) Remove pulldown diaphragm and linkage assembly.

4) Remove bowl vent cover, gasket and spring assembly.

5) Remove bowl vent from its seat.

6) Remove fast idle cam and link. Remove choke control lever screw.

7) Remove dashpot if equipped (Chrysler).

8) Release throttle return spring tension.

9) Remove return spring and bracket.

10) Note which slot pump link is in, and remove pump link and rocker arm assembly.

11) Remove 7 air horn screws and remove air horn from main body. Do not pry air horn loose.

NOTE – *Use care when removing to avoid damaging parts extending beneath air horn.*

12) Place air horn upside-down on bench.

13) Remove gasket. Do not scrape with metal scraper. Use suitable cleaner or nylon scraper to prevent damage to gasket surface of casting.

14) Remove pump operating rod screw and clamp.

15) Remove pump spring retaining plate and screw.

16) Disconnect pump drive spring and pump assembly.

17) Remove pump operating rod and grommet from bowl cover.

18) Remove choke housing screws, retainer, gasket and housing (Ford).

NOTE – *Manufacturer does not recommend removal of choke valve and shaft unless replacement is required.*

19) On Chrysler models, power piston assembly retaining ring is staked in place. Remove staking, then remove vacuum piston from air horn by depressing piston and letting it snap up against ring. Do not remove this assembly on Ford models.

CAUTION – *Do not try to remove main well tube. Blow out with compressed air from inside and outside of cover.*

Main Body – 1) Remove fuel inlet fitting valve assembly. Remove and discard old gaskets.

2) Remove float shaft retainer, shaft and float assembly.

3) Turn main body upside-down and catch pump discharge weight and ball as they fall out.

4) Remove main metering jet with suitable wrench.

5) Remove power (enrichment) valve needle with $\frac{3}{8}$" wide screwdriver.

NOTE – *Screwdriver should be modified by cutting a $\frac{1}{16}$" wide and $\frac{3}{8}$" deep slot in center of blade. This provides clearance for valve stem.*

6) On Ford models, remove hot idle compensator cover, HIC valve and gaskets from main body.

7) Remove 3 main body-to-throttle body screws and separate assemblies. Remove and discard gasket. (all models).

8) On Ford models, remove low idle speed (TSP off) adjusting screw and spring, and remove solenoid.

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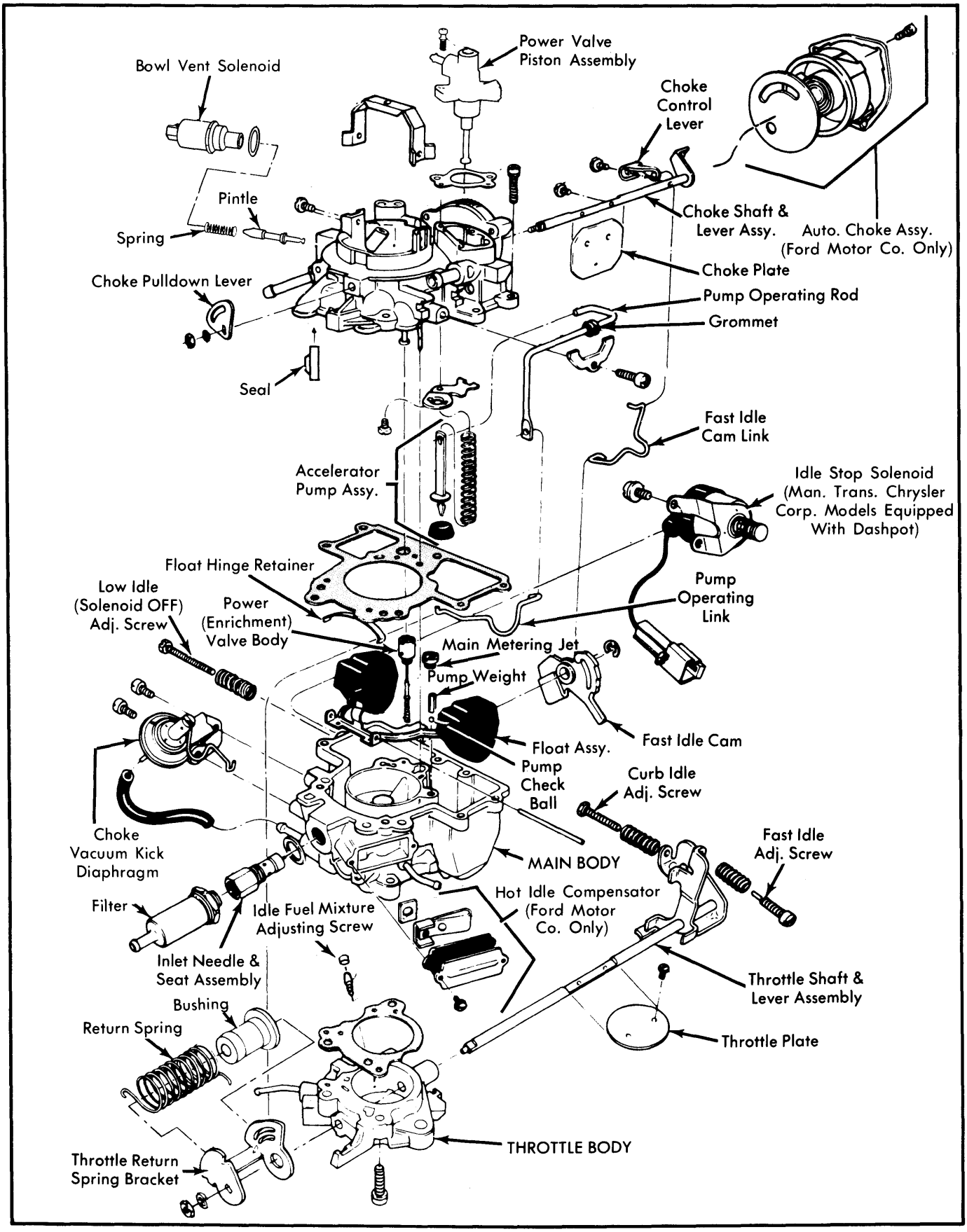

Fig. 7 Exploded View of Holley Model 1946 IV Carburetor

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Throttle Body – **1)** Remove curb idle speed screw.

2) On Chrysler models, remove idle limiter cap, mixture screw and spring from throttle body.

3) On Ford models, turn mixture screw clockwise to its leanest position and remove limiter cap. Do not bend screw when removing cap.

NOTE – *Record position of mixture screw before removal.*

4) On Ford models, turn mixture screw clockwise until it gently seats. Record number of turns it takes to seat screw and remove screw and spring.

NOTE – *Manufacturers do not recommend removal of throttle plate or shaft. If damage or wear is evident, replace throttle body assembly.*

CLEANING & INSPECTION

- Do not place choke cover, pulldown diaphragm assembly, bowl vent assembly or pump plunger in cleaning solvent.
- Inspect all gasket mating surfaces for nicks, burrs or any damage that would prevent gasket sealing.
- Inspect idle mixture screw tip. If grooved or worn, replace with new needle.
- Ensure all new gaskets match gaskets removed in placement of holes and slots. Use new gaskets only.
- Ensure all parts are clean and free of solvent before assembly. Wash parts in hot water and blow dry with compressed air.

REASSEMBLY

Reassemble carburetor in reverse order of disassembly. Use new gaskets and seals. Make sure gaskets fit correctly and all holes are punched through and correctly located.

CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Float Level Setting	Accelerator Pump		Fast Idle Cam Setting	Choke Unloader Setting	Choke Vacuum Kick Setting	Auto. Choke Setting	Bowl Vent Setting
		Hole Setting	Rod Setting					
Chrysler Corp.								
R-9253A	Flush①	#2	1.615″	.090″	.250″	.150″	.....	1/16″
Ford Motor Co.								
E1BE-AFA	.69″②	#2	2.150″	.082″	.150″	.113″	2NR	.....
E1BE-AGA	.69″②	#2	2.150″	.086″	.150″	.120″	2NR	.....
E1BE-AKA	.69″②	#2	2.150″	.082″	.150″	.113″	2NR	.....
E1BE-ARA	.69″②	#2	2.150″	.082″	.150″	.113″	2NR	.....
E1BE-ASA	.69″②	#2	2.150″	.082″	.150″	.113″	2NR	.....

① – See adjustment procedure.
② – Wet Setting.