1982 Holley Carburetors

HOLLEY MODEL 1945 SINGLE BARREL

CARBURETOR APPLICATION

CHRYSLER CORP. (HOLLEY) CARBURETOR NO.

Application	Man. Trans.	Auto. Trans.
3.7L 6-Cyl.		
Federal	R-9765-A	R-9762-A
Calif.	R-9153-A	R-9132-A

CARBURETOR IDENTIFICATION

Carburetor is identified by a part number stamped into main body, or by tag attached to carburetor top.

DESCRIPTION

Holley 1945 is single venturi of concentric downdraft design. Internally, fuel bowl completely surrounds venturi. Carburetor consists of 3 main parts: bowl cover, main body, and throttle body. Carburetor includes 4 basic fuel metering systems: idle and transfer, main metering system, accelerating system and electric assist choke systems.

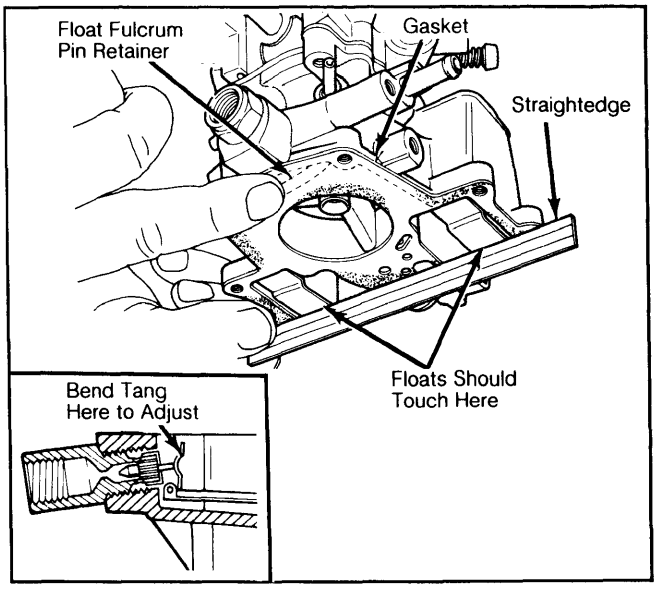
ADJUSTMENT

NOTE: For all on-vehicle adjustments, see TUNE-UP SERVICE PROCEDURES.

FLOAT LEVEL

1) With air horn removed, turn main body upside-down with gasket installed. Using a straightedge, check that ends of floats furthest away from the fuel inlet just contact straightedge. *See Fig. 1.*

Fig. 1: Adjusting Float Level



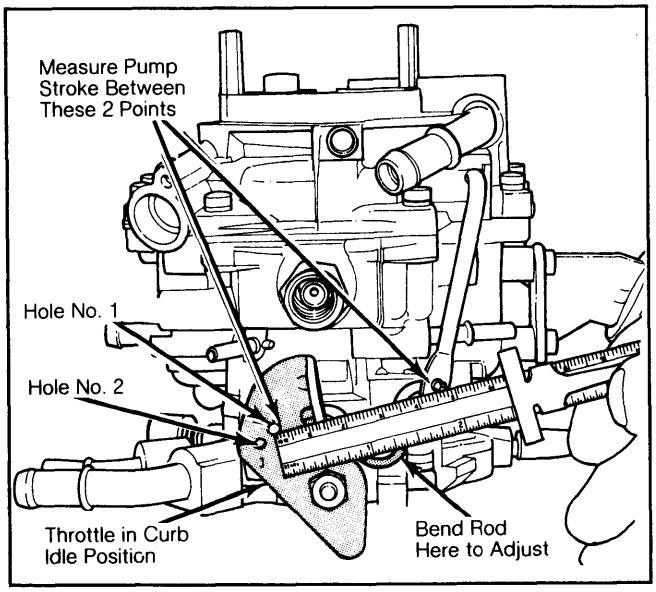
Measure at ends of floats furthest away from fuel inlet.

2) To adjust, bend float tang on float arm that contacts fuel inlet needle.

ACCELERATOR PUMP STROKE

1) Place throttle lever in curb idle position. Make sure accelerator pump rod link is installed in correct hole in throttle lever. *See Fig. 2.*

Fig. 2: Adjusting Accelerator Pump Stroke



Ensure pump rod link is installed in correct hole.

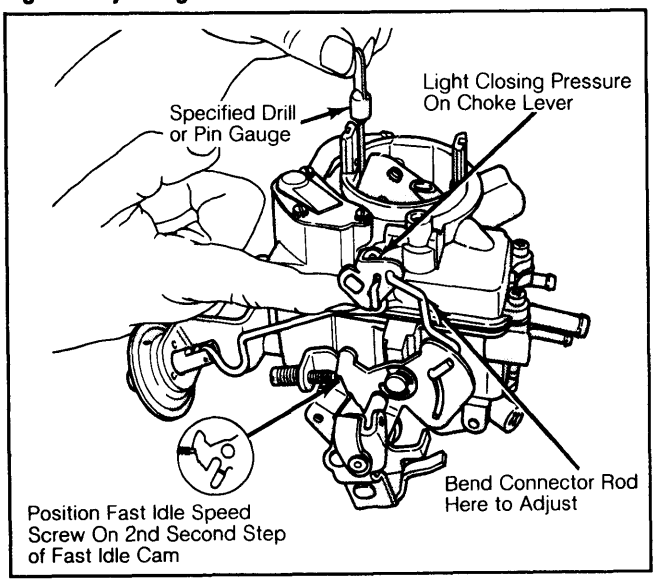
2) Measure accelerator pump stroke specified distance between center of rod in throttle lever and center of rod in accelerator pump arm.

3) To adjust, bend the accelerator pump rod at existing "U" bend.

FAST IDLE CAM POSITION

1) Position fast idle speed screw on 2nd step of fast idle cam. Apply light finger pressure on choke shaft lever to close choke valve. *See Fig. 3.*

Fig. 3: Adjusting Fast Idle Cam Position



Place fast idle speed screw on 2nd step of fast idle cam.

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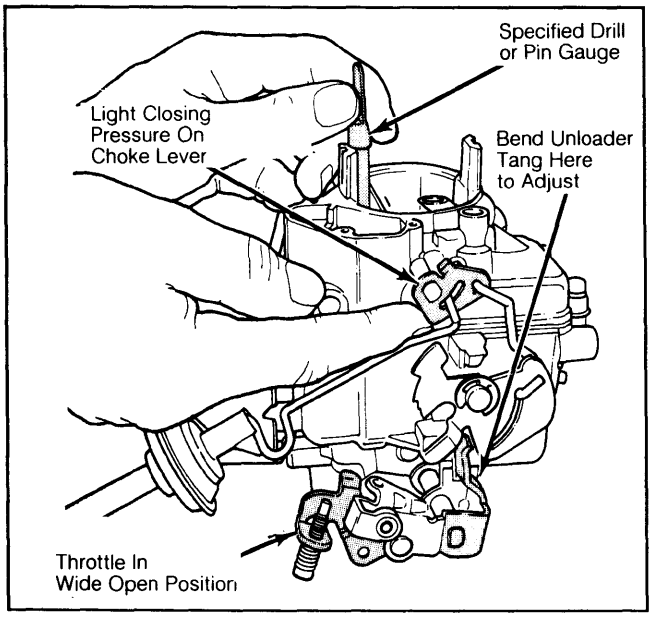
2) Measure fast idle cam specified clearance between top of choke valve and air horn wall at throttle lever side. Measure clearance using a specified drill or pin gauge of specified clearance.

3) To adjust, bend fast idle cam connector rod until specified valve opening is obtained.

CHOKE UNLOADER

1) Hold throttle valves in wide open position. Apply light finger pressure on the choke shaft lever to close choke valve. *See Fig. 4.*

Fig. 4: Adjusting Choke Unloader



Measure with throttle valves wide open.

2) Measure choke unloader specified clearance between top edge of choke valve and air horn wall at throttle lever side. Clearance can be checked using a specified drill or pin gauge.

3) To adjust, bend choke unloader tang on throttle lever until specified clearance is obtained.

CHOKE VACUUM KICK

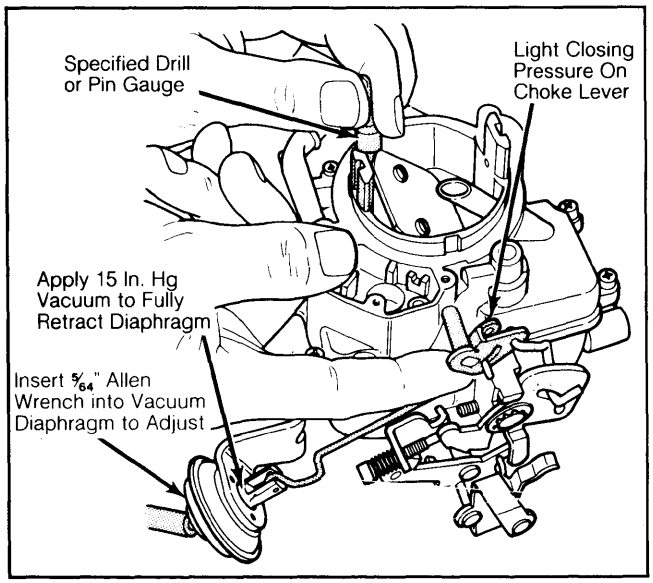
1) Open throttle and close choke. Close throttle to trap fast idle cam in closed choke position. *See Fig. 5.*

2) Disconnect vacuum hose from choke vacuum diaphragm. Connect hand vacuum pump to diaphragm and apply at least 15 in. Hg. Apply light finger pressure on choke shaft lever to compress spring in diaphragm stem without distorting linkage. Diaphragm stem reaches a stop as spring is compressed.

3) Measure choke vacuum kick specified clearance between upper edge of choke valve and air horn wall. Clearance can be measured using a specified drill or pin gauge.

4) To adjust, insert a 5/64" Allen wrench into choke vacuum diaphragm. Turn adjusting screw to obtain specified clearance. Check all linkage for freedom of movement. Remove vacuum pump and install vacuum hose on diaphragm.

Fig. 5: Adjusting Choke Vacuum Kick



Spring in diaphragm stem must be compressed during adjustment.

OVERHAUL

DISASSEMBLY

1) Place carburetor on a repair stand for disassembly to prevent damage to throttle valves. Remove wire retainer and bowl vent solenoid. Remove solenoid idle stop (SIS).

2) Remove fast idle cam retaining clip, fast idle cam and connector rod. Remove rod from fast idle cam.

3) Remove choke vacuum diaphragm, link and bracket assembly. Disconnect diaphragm rod from slot in choke lever. Place diaphragm aside to avoid cleaning with carburetor cleaner.

4) Remove nut and washer from throttle shaft. Remove throttle lever and link, noting hole position of lever. Remove air horn screws. Separate air horn from main body by lifting straight up until vacuum piston, accelerator pump and main well tube clears main body.

NOTE: Do not pry cover off with screwdriver. If necessary, tap with a plastic hammer.

5) Remove air horn gasket. Remove accelerator pump rod retainer screw and retainer. Remove accelerator pump retainer screw and accelerator pump.

NOTE: Do not scrape any remaining gasket material from air horn or carburetor surfaces with a metal scraper. Use nylon or hard plastic scraper to prevent damage to components.

6) Rotate and remove accelerator pump operating rod. Remove pump operating rod grommet from air horn. Remove 3 screws and power valve diaphragm assembly. Do not attempt to remove main well tube from air horn. Main well tube must be carefully blown out from both sides of cover.

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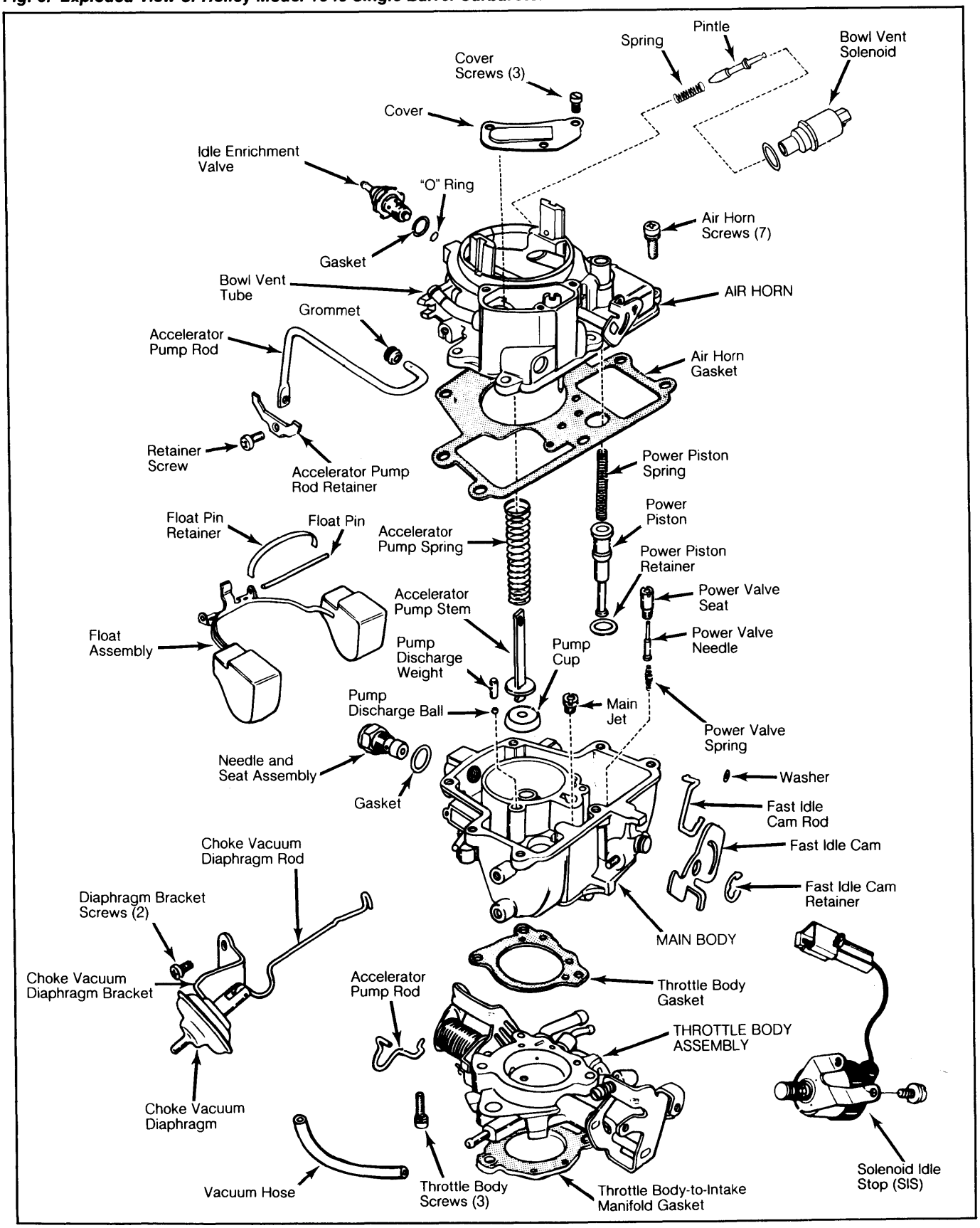
Fig. 6: Exploded View of Holley Model 1945 Single Barrel Carburetor



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7) Remove fuel inlet fitting from main body and separate gaskets. Remove float pin retainer, float pin and float assembly. Turn main body upside-down and catch accelerator pump discharge check ball and weight.

8) Remove main jet using a screwdriver with a blade at least 3/8" wide. Ensure screwdriver has a good square blade.

9) Carefully depress power valve needle with a 3/8" wide screwdriver until screwdriver blade fits into slot in top of valve. Remove valve assembly. Power valve assembly consists of needle, seat and spring. All of these components of service valve should be used if replacement is required.

10) Remove 3 throttle body screws and separate throttle body from main body. Remove throttle body gasket. Remove idle speed screw from throttle body. Carefully remove idle limiter cap from mixture screw. Remove mixture screw and spring, noting number of turns required to seat screw.

CLEANING & INSPECTION

- Use a regular carburetor cleaning solution. Soak components long enough to thoroughly clean all surfaces and passages of foreign matter.
- Do not soak any components containing rubber, leather or plastic.
- Remove any residue after cleaning by rinsing components in a suitable solvent.
- Blow out all passages with dry, compressed air.

REASSEMBLY

To reassemble carburetor, reverse disassembly procedures, using new gaskets and seals. Make sure gaskets fit correctly and that all holes and slots are punched through and correctly located. Also, note the following:

1) Install idle mixture screw and spring in throttle body. Ensure tapered portion is straight and smooth.

2) Install a new throttle body gasket on main body. Place throttle body in position and tighten 3 retaining screws to 30 INCH lbs. (3 N.m).

3) Install accelerator pump discharge check ball and weight. Fill fuel bowl with clean fuel to check ball and seat operation.

4) Hold ball and weight down with a brass rod. Place accelerator pump assembly in well and operate by hand. If no resistance is felt, check ball is leaking.

5) Remove weight and leave check ball in place. Using a small drift punch, lightly tap ball against seat to form a new seal. Remove old check ball and discard. Install a new check ball and weight.

6) Perform fuel leak test again. If there is still no resistance felt, main body must be replaced. If resistance is felt, check ball is seating correctly. Remove check ball and weight.

7) Install accelerator pump, pump rod and rod retainer in air horn.

8) Install power valve assembly in bottom of fuel bowl. Tighten securely. Ensure needle valve operates freely. Install main jet in main body.

9) Install float pin in main body. Place float assembly in float shaft cradle. Install float pin retainer. Check float alignment to make sure it does not bind against main body casting.

10) Install a new gasket on fuel inlet fitting. Install fitting in main body. Tighten securely. Check float level.

11) Insert check ball and weight into accelerator pump discharge well. Position air horn gasket on air horn. Carefully install air horn on main body. Make sure accelerator pump cup is not damaged.

12) Install 7 air horn screws and tighten alternately in steps to 30 INCH lbs. (3 N.m). Install fast idle cam and link.

13) Install choke vacuum diaphragm, solenoid idle stop (SIS), and bowl vent solenoid.

CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Float Level	Accelerator Pump		Fast Idle Cam	Choke Unloader	Choke Vacuum Kick
		Hole	Stroke			
R-9132-A	Flush[1]	#2	1.61"	.090"	.250"	.130"
R-9153-A	Flush[1]	#2	1.70"	.080"	.250"	.130"
R-9762-A	Flush[1]	#2	1.61"	.090"	.250"	.130"
R-9765-A	Flush[1]	#2	1.70"	.080"	.250"	.130"

[1] — Setting is flush with top of casting to .050" above.