

## HOLLEY MODEL 1940 SINGLE BARREL

### INTERNATIONAL HARVESTER

Application	I.H. No.
1974	
258" Light Duty	
Federal.....	6831
California.....	6800
258" Heavy Duty.....	6832

### DESCRIPTION

Holley 1940 is single venturi of concentric downdraft design. Internally, fuel bowl completely surrounds venturi. Carburetor consists of three main parts; bowl cover, main body and throttle body. Carburetor includes four basic metering systems; idle and transfer, main metering system, accelerating system and power enrichment system. Other systems include, fuel inlet and choke systems.

### ADJUSTMENTS

#### HOT (SLOW) IDLE RPM

See appropriate article in TUNE-UP Section.

#### COLD (FAST) IDLE RPM

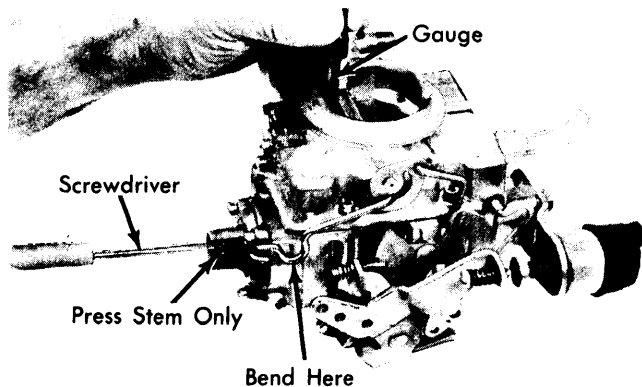
See appropriate article in TUNE-UP Section.

#### ACCELERATOR LINKAGE

See appropriate article in TUNE-UP Section.

#### VACUUM KICK

Open throttle and close choke. Release throttle first to trap fast idle screw on top step of fast idle cam. Depress choke vacuum diaphragm stem and close choke plate. Insert specified gauge between choke plate and air horn wall. If necessary to adjust, bend choke diaphragm stem to obtain specified clearance.

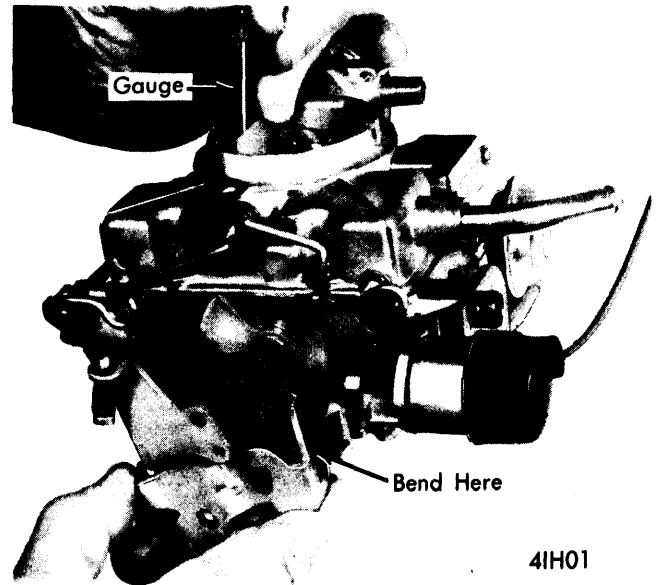


4IH05

#### VACUUM KICK ADJUSTMENT

#### CHOKE UNLOADER

Hold throttle in wide open position and insert specified gauge between upper edge of choke plate and air horn wall. Slight drag should be felt as gauge is withdrawn. If adjustment is necessary, bend unloader tang (on throttle lever) until correct opening is obtained.



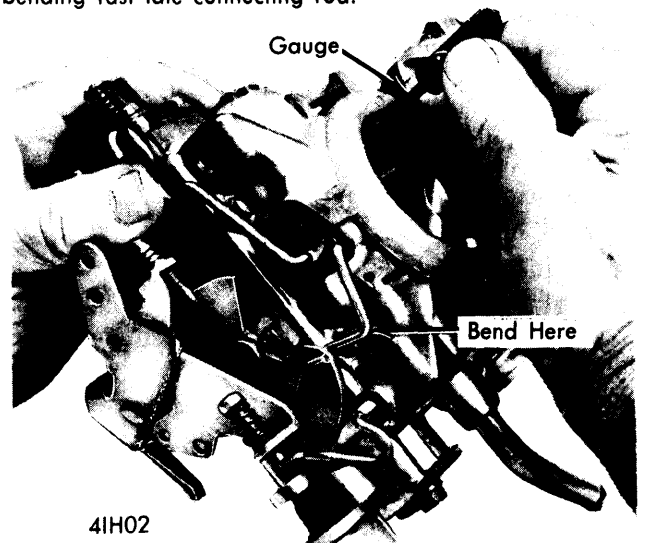
4IH01

#### CHOKE UNLOADER ADJUSTMENT

#### FAST IDLE CAM POSITION

**NOTE** — This adjustment is necessary to assure time at which each cam step occurs during engine warm-up.

With fast idle speed screw contacting second highest step of fast idle cam, move choke plate toward closed position with light closing pressure on choke plate. Insert specified gauge between choke plate and air horn wall. If slight drag is not felt as gauge is withdrawn, adjustment will be necessary. Adjust by bending fast idle connecting rod.



4IH02

#### FAST IDLE CAM POSITION

#### FUEL BOWL VENT

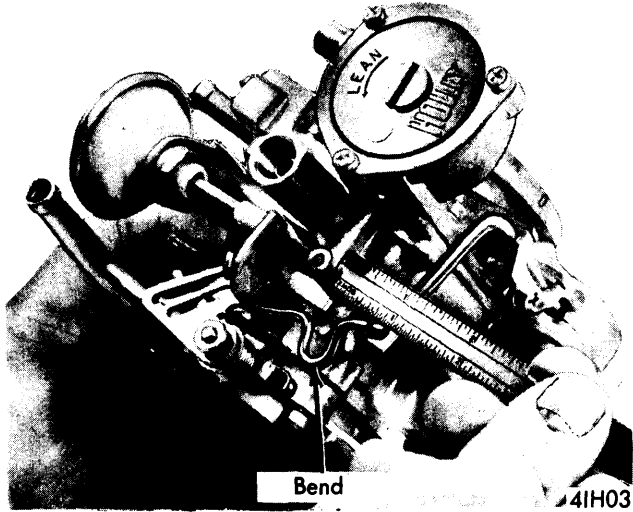
With engine stopped, remove air cleaner. Open throttle and close choke plate. Release throttle first to trap fast idle cam. Measure clearance between end of bowl vent actuating rod and pad on throttle lever. Clearance should be .153-.159". If adjustment is necessary, bend actuating rod to obtain specified clearance.

# Holley Carburetors

## HOLLEY MODEL 1940 SINGLE BARREL (Cont.)

### ACCELERATOR PUMP STROKE

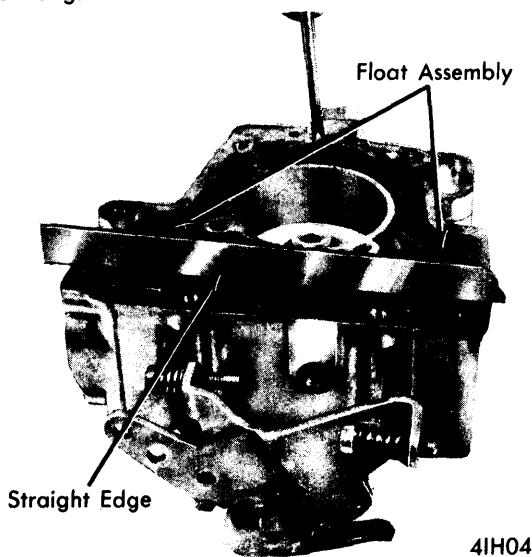
With idle screw backed off and throttle plate completely closed, check pump stroke by measuring distance from vacuum passage casting, to center of hole in pump operating rod. If adjustment is necessary, bend operating rod at bend.



PUMP PISTON STROKE ADJUSTMENT

### FLOAT LEVEL

With air horn removed place straight-edge across surface of float bowl. Floats should just touch straight-edge, when needle valve is held in closed position. If adjustment is necessary, bend float tang.



CHECKING DRY FLOAT SETTING

### FUEL LEVEL

With engine at normal operating temperature, remove air horn and measure distance from top of float bowl down to fuel level. Distance should be  $1\frac{1}{16} \pm \frac{1}{32}$ ". If adjustment is necessary, bend float tang.

## OVERHAUL

### DISASSEMBLY

- 1) Remove choke housing cover, disconnect diaphragm link and remove diaphragm assembly and spring. Depress diaphragm modulator spring and remove spring retainer. Remove solenoid valve assembly.
- 2) Remove fast idle cam and link. Remove dashpot and bracket, as an assembly. Do not immerse them in solvent. Remove accelerator pump rocker arm retaining nut, washer, spring and pump link. Separate link from accelerator pump rocker arm.
- 3) Remove air horn retaining screws and separate air horn from carburetor. Remove accelerator pump operating rod retainer screw and retainer. Rotate pump operating rod and disconnect pump drive spring and accelerator pump assembly. Set pump stem and cup aside and do not immerse in carburetor cleaner. Rotate pump operating rod and remove from bowl cover.
- 4) Using suitable tool, remove staking from vacuum piston retainer. Remove vacuum piston from fuel bowl cover. Remove bowl vent valve from rod, then remove bowl vent valve rod spring from rod. Remove hot idle compensator valve cover, valve and gasket. Using small file, remove staking from choke plate screws and remove choke plate and shaft.

### CLEANING & INSPECTION

Inspect all parts for wear or damage, replace as necessary. Using suitable carburetor cleaner, clean all carburetor parts (except those noted).

### REASSEMBLY

Using all new gaskets, reverse disassembly procedures and note the following:

**Vacuum Piston** — Before installing vacuum piston, be sure to remove all staking from retainer cavity. Install vacuum cylinder, seat retainer and stake lightly with suitable tool.

**Accelerator Pump** — Test accelerator pump discharge valve prior to assembly, by coating pump piston with oil or filling fuel bowl with gasoline. While holding pump discharge weight down, operate pump plunger. If no resistance is felt, pump discharge check ball is leaking. Stake check ball with suitable drift punch and test again.

## CARBURETOR ADJUSTMENT SPECIFICATIONS

Holley Carb. No.	Idle Speed (Engine RPM)		Accel. Pump Setting	Float Setting	Fast Idle Cam Setting	Vacuum Kick Setting	Choke Unloader Setting
	Hot	Fast					
6831	.....	.....	.....	.....	.....	.....	.....
6832	.....	.....	$2\frac{5}{32}$ "	1"	.140"	.155"	.265"
6800	.....	.....	.....	.....	.....	.....	.....