



General Instructions

- Take lots of pictures as you take your carburetor apart. This will give you a reference of where things go.
- Using a cookie sheet with folded up sides will help keep parts from falling on the floor.
- We suggest not removing the throttle shaft, valves, or choke shaft unless they are corroded, or very dirty. These parts can be easily damaged and are difficult to re-assemble.
- Instruction sheets that come with our carburetor kits are somewhat generic. It may not match your parts exactly.
- Do NOT use WD-40 around your carburetor. It reacts with ethanol.
- Using Silicon Spray Lubricant on the gaskets will help with sticking in case you need to take the carburetor apart again.
- Be careful after taking the top of the carburetor off. Turning the carburetor upside down may cause parts to fall out and you won't know where they were.
- Screws and jets that are frozen can often be removed after heating outside the screw or jet.
- Stuck check balls can be removed by heating the outside of where the check ball resides and tapping the carburetor on the work bench.
- Do not discard any parts until complete done. You may have to refer for size, or matching.

Cleaning:

- Clean with carburetor dis-assembled.
- Soak all parts except rubber & electrical in Simple Green for 2 hours. Aluminum parts will get discolored if left longer.
- Wash parts with hot water if available to remove all chemicals.
- Blow out each passage way taking special notice of the smaller ones. Test each passage that air goes through the entire passage.
- Blow out the idle mixture hole.

- Check any hole above the idle mixture hole (inside the bore). This is the idle discharge and often becomes plugged.
- A tooth brush can facilitate cleaning parts.
- Soda blasting, then washing again will make the carburetor look good any will clean any minor deposits.
- Any corrosion, or deposits that are hard to remove may indicate the passages are also corroded and the carburetor should be replaced.
- If your engine has been sitting for 6 months or more, the gas has probably turned, and the gas tank will need to be cleaned as well as the fuel lines. Flushing new gas through the tank will not be enough.

Assembly:

- Do NOT apply any gasket sealant on any of the gaskets. Gas will break sealant part and the particles will clog the small passages.
- Test your float.
 - Brass floats should be immersed into hot water. As the air inside expands any leak will be noticeable with air bubbles.
 - Plastic, or Nitrophyl floats should be weighed. The weight is in grams. Check our technical pages for any weight specification that we may have.
- Most gaskets will fit as expected, but you may have to trim some, especially under the venturis.
- Your kit may include multiple gaskets in order to get better coverage out of the kit. Use the one that fits the best. Look for any opening the gasket may leave allowing air into the carburetor. Some holes may be casting holes that don't lead to anything and do not have to be covered.
- Mounting gaskets for multiple bore carburetors do not have to have matching holes. Example a four-barrel gasket can be open in the middle instead of 4 holes as long as the carburetor has some kind of passage between bores. The passage is between primary, or secondary, not both.
- When adjusting the float be careful not to put any pressure on the needle. The viton tip is easily damaged.
- Most idle mixture screws can be cleaned using a soft wire wheel. Inspect for any scoring, which would indicate over tightening. Screw with scoring should be replaced.

Accelerator Pumps:

- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and the gas to do its job naturally.
- Twist the pump as you are inserting to help keep the cup from curling or folding over.
- Test your accelerator pump circuit before putting the top of the carburetor back on. Our technical pages have instructions on how to do this for most carburetor types.
- Pump wells are usually slight tapered, and the pump will not seal until it gets towards the bottom.

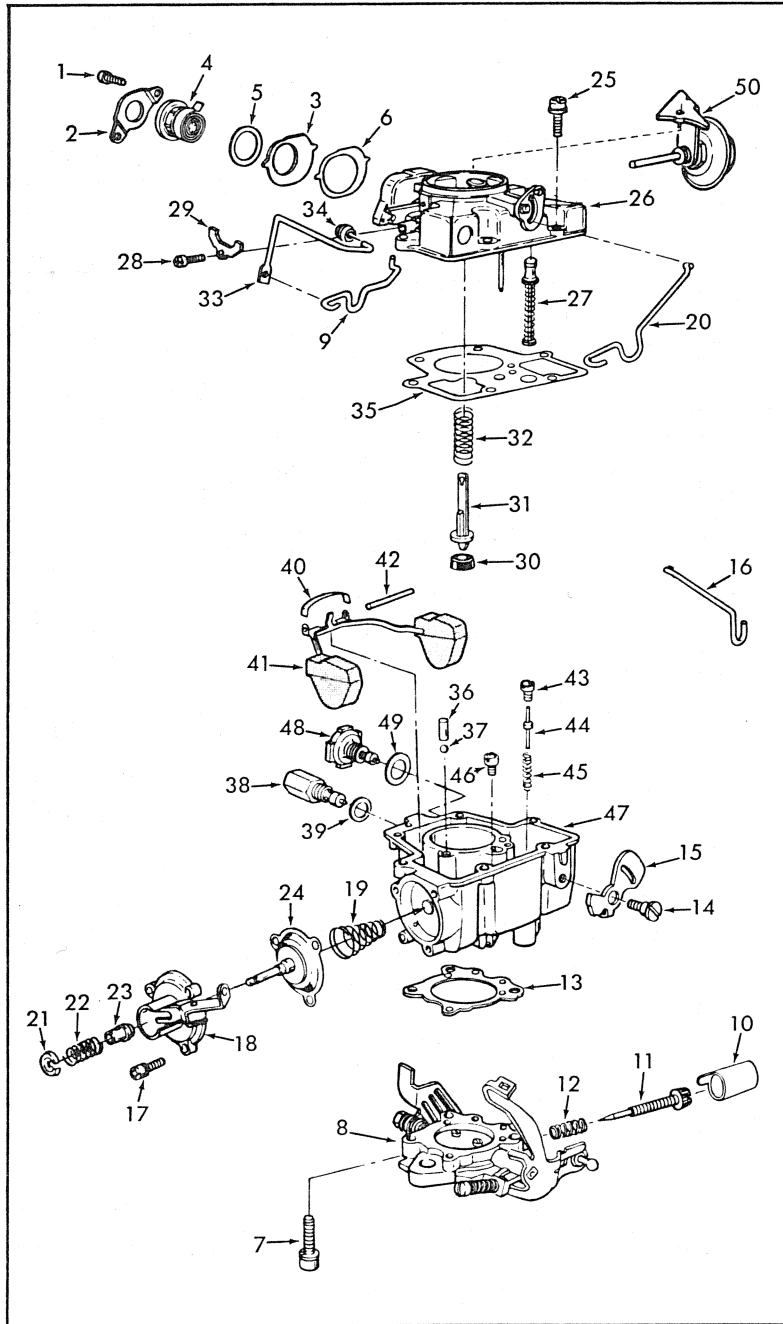
INSTRUCTION SHEET

HOLLEY CARBURETOR—MODEL 1940

50-420-1

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET



DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. CAUTION: MAIN WELL TUBE IS NOT REMOVABLE. TAKE EXTREME CARE SO AS NOT TO BEND OR DAMAGE TUBE. NOTE: REMOVE STAKING FROM BOWL COVER FOR EASY REMOVAL OF POWER PISTON ASSEMBLY (27). TO REMOVE PLASTIC LIMITER CAP (10) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (2) - CHOKE COVER CLAMP	26. COVER - BOWL
2. CLAMP - CHOKE COVER	27. PISTON ASSEMBLY - POWER VALVE
3. PLATE - CHOKE COVER	28. SCREW - PUMP ROD CLAMP
4. CHOKE COVER & SPRING ASSY.	29. CLAMP - PUMP ROD
5. GASKET - CHOKE COVER	30. CUP - PUMP PISTON
6. GASKET - CHOKE COVER PLATE	31. STEM - PUMP PISTON
7. SCREW & LOCKWASHER (3) - THROTTLE BODY	32. SPRING - PUMP
8. THROTTLE BODY ASSEMBLY	33. ROD - PUMP
9. LINK - PUMP OPERATING	34. SEAL - PUMP ROD
10. CAP - IDLE LIMITER	35. GASKET - BOWL COVER
11. NEEDLE - IDLE ADJUSTING	36. WEIGHT - PUMP DISC. BALL
12. SPRING-IDLE ADJUSTING NEEDLE	37. BALL - PUMP DISC.
13. GASKET - THROTTLE BODY	38. NEEDLE & SEAT ASSEMBLY
14. SCREW - FAST IDLE CAM	39. GASKET - NEEDLE & SEAT
15. CAM - FAST IDLE	40. RETAINER - FLOAT PIN
16. ROD - FAST IDLE	41. FLOAT ASSEMBLY
17. SCREW & LOCKWASHER (3) - DIAPHRAGM COVER	42. PIN - FLOAT HINGE
18. COVER - DIAPHRAGM	43. JET - POWER VALVE
19. SPRING - DIAPHRAGM	44. STEM - POWER VALVE
20. LINK - CHOKE DIAPHRAGM	45. SPRING - POWER VALVE
21. RETAINER-MODULATOR SPRING	46. JET - MAIN
22. SPRING - CHOKE MODULATOR	47. BOWL ASSEMBLY - FLOAT VALVE - SPARK (SOME MODELS)
23. SLEEVE - CHOKE MODULATOR	48. GASKET - SPARK VALVE
24. DIAPHRAGM ASSEMBLY - CHOKE	49. DASHPOT ASSEMBLY - (SOME MODELS)
25. SCREW & LOCKWASHER (6) - BOWL COVER	

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE (1) A CARBURETOR CLEANING SOLVENT, (2) LACQUER THINNER OR (3) DENATURED ALCOHOL. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS.

CAUTION: DO NOT SOAK CHOKE BI-METALLIC PARTS (4), CHOKE DIAPHRAGM (24), DASHPOT (50), OR SPARK VALVE (48) IN CARBURETOR CLEANER OR SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS.

SPECIAL INSTRUCTIONS

BOWL COVER AND THROTTLE BODY SCREWS - TORQUE TO 30" LBS.

POWER PISTON INSTALLATION (27), LIGHTLY STAKE CASTING AROUND WASHER.

IDLE ADJUSTING NEEDLE (11) - TURN IN UNTIL SEATED, THEN BACK OUT 1 1/2 TURNS. (DO NOT INSTALL LIMITER CAP AT THIS TIME.)

PUMP LINK INSTALLATION (9) - INSTALL IN CENTER SLOT OF OPERATING LEVER.

CHOKE COVER SETTING (4) - SET TO INDEX MARK.

CURB IDLE SPEED R.P.M.
PASS CAR.
A/T 500-550 R.P.M.
A/T W/AC 600 R.P.M.
S/T 500-700 R.P.M.
S/T W/AC 650 R.P.M.

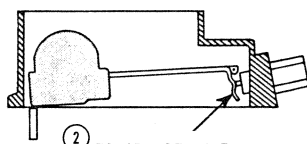
TRUCK.
A/T 500-550 R.P.M.
S/T 500-700 R.P.M.

DATA TABLE
HOLLEY REPLACEMENT CARBURETORS

APPLICATION	PUMP SLOT	CHOKE PULLDOWN	UNLOADER	CHOKE SETTING
AMERICAN MOTORS 6 CYL. Carb. No.'s R7677, R7678, R7679	No. 2	.060"	.125"	1-RICH
FORD 6 CYL. Carb. No.'s R7563, R7564, R7565, R7566, R7567, R7568	No. 2	.130"	.150"	1-RICH
Carb. No. R8061	No. 2	.090"	.150"	1-RICH

ADJUSTMENTS

- ① FLOAT BOWL INVERTED AND FLOAT PIN HELD IN PLACE BY FLOAT PIN RETAINER. TOE OF EACH FLOAT SHOULD JUST TOUCH STRAIGHT EDGE HELD ACROSS SURFACE OF FLOAT BOWL.

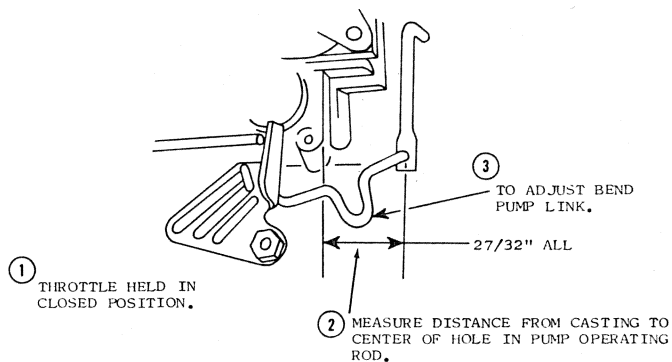


- ② TO ADJUST BEND
FLOAT TANG.

CAUTION: DO NOT EXERT
PRESSURE ON RESILIENT
NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT

Fig. 1



- ① THROTTLE HELD IN
CLOSED POSITION.

- ② MEASURE DISTANCE FROM CASTING TO
CENTER OF HOLE IN PUMP OPERATING
ROD.

- ③ TO ADJUST BEND
PUMP LINK.

PUMP STROKE ADJUSTMENT.

Fig. 2

- ② HOLD CHOKE VALVE TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

SMALL BORE 1 7/16" (1/8")
LARGE BORE 1 11/16" (5/32")

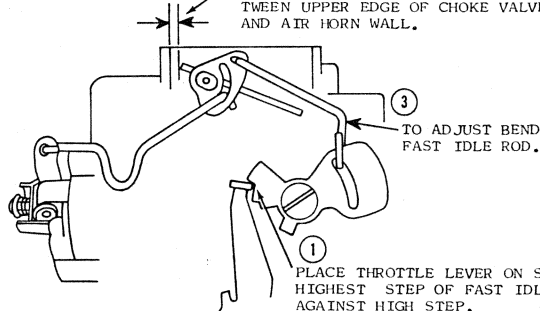
- ① PRESS IN ON DIAPHRAGM STEM
UNTIL DIAPHRAGM IS SEATED.

- ③ TO ADJUST BEND
DIAPHRAGM LINK.

VACUUM PULLDOWN ADJUSTMENT.

Fig. 3

- SMALL BORE 1 7/16" (1/16")
LARGE BORE 1 11/16" (5/64")
- ② HOLD CHOKE VALVE TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

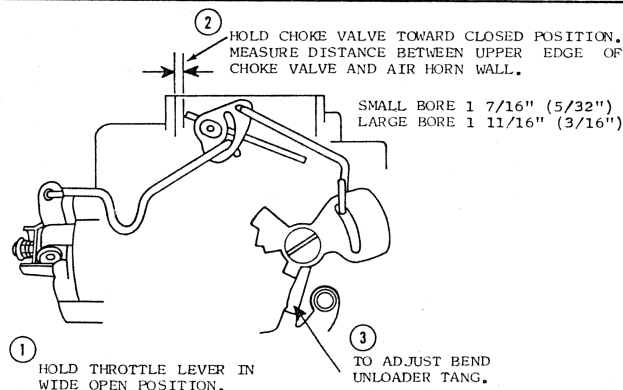


- ③ TO ADJUST BEND
FAST IDLE ROD.

- ① PLACE THROTTLE LEVER ON SECOND
HIGHEST STEP OF FAST IDLE CAM
AGAINST HIGH STEP.

FAST IDLE CAM POSITION ADJUSTMENT.

Fig. 4



- ① HOLD THROTTLE LEVER IN
WIDE OPEN POSITION.

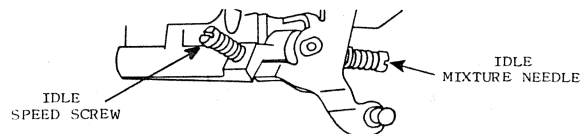
SMALL BORE 1 7/16" (5/32")
LARGE BORE 1 11/16" (3/16")

- ③ TO ADJUST BEND
UNLOADER TANG.

UNLOADER ADJUSTMENT.

Fig. 5

1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS.
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN.
 - A. AUTOMATIC TRANSMISSION IN DRIVE
 - C. HEADLIGHTS ON HIGH BEAM.
3. ADJUST THROTTLE STOP SCREW TO SPECIFIED IDLE SPEED R.P.M. USING A TACHOMETER.
4. AIR CLEANER INSTALLED.
5. ADJUST IDLE MIXTURE NEEDLE TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING. READJUST IDLE SPEED IF NECESSARY.
6. AFTER COMPLETING THE ABOVE, INSTALL THE LIMITER CAP ON THE IDLE MIXTURE NEEDLE. NOTE: TO AID INSTALLATION, IT MAY BE NECESSARY TO SOAK CAPS IN BOILING HOT WATER FOR A FEW MINUTES.
 - A. PLACE THE CAP ON THE MIXTURE NEEDLE HEAD WITH THE TAB IN THE EXTREME COUNTERCLOCKWISE POSITION AGAINST THE LIMITER STOP. PRESS FIRMLY ON CAP TO SEAT.



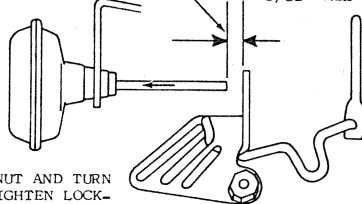
SLOW IDLE SPEED ADJUSTMENT

Fig. 6

- ② DEPRESS THE DASHPOT STEM AND MEASURE DISTANCE BETWEEN STEM AND LEVER.

3/32" ALL

- ③ TO ADJUST LOOSEN LOCKNUT AND TURN
DASHPOT CHECK AND RETIGHTEN LOCK-
NUT.

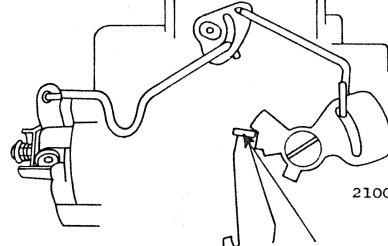


- ① THROTTLE AT CURB IDLE POSITION.

DASHPOT ADJUSTMENT
(ON CAR SOME MODELS)

Fig. 7

- ② TO ADJUST INSERT SCREWDRIIVER BLADE IN THE SLOT OF
TANG AND TWIST CLOCKWISE TO DECREASE OR COUNTER-
CLOCKWISE TO INCREASE ENGINE SPEED.



2100 R.P.M. ALL

- ① TRANSMISSION IN NEUTRAL OR PARK. PLACE THROTTLE LEVER
ON SECOND HIGHEST STEP OF FAST IDLE CAM AND CHECK R.P.M.

FAST IDLE SPEED ADJUSTMENT
(ON CAR AUTOMATIC CHOKE MODELS)

Fig. 8