

INSTRUCTION SHEET

HOLLEY CARBURETOR - MODEL 2300

50-301

SHOWING THE LATE DESIGN SAFETY SEAL ADJUSTABLE NEEDLE AND SEAT ASSEMBLY

DISASSEMBLY

1. USE EXPLODED VIEW ON OPPOSITE SIDE OF THIS SHEET AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION.

CLEANING

2. 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 BODY IS FREE OF ALL HARD CARBON DEPOSITS. RINSE OFF IN SUITABLE SOLVENT AND BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK RUBBER, LEATHER OR PLASTIC PARTS IN SOLVENT.

REASSEMBLY

3. REASSEMBLE THE CARBURETOR USING THE REVERSE ORDER OF DISASSEMBLY. NOTE: WHEN INSTALLING IDLE ADJUSTING NEEDLES (15), RUN THEM DOWN UNTIL THEY SEAT LIGHTLY, THEN BACK THEM OUT ONE TURN. AFTER INSTALLING THE FLOAT, POSITION THE FUEL BOWL UPSIDE DOWN AND ADJUST THE FLOAT AS OUTLINED IN STEP 1 OF FLOAT LEVEL ADJUSTMENT.

ADJUSTMENTS

1. **FLOAT LEVEL.** SEE FIG. 1. STEP 1. WITH FUEL BOWL IN AN INVERTED POSITION, TURN THE ADJUSTING SCREW SLOT UNTIL THE TOP OF THE FLOAT IS PARALLEL WITH THE TOP OF THE FUEL BOWL. TIGHTEN LOCKNUT SNUGLY. STEP 2. WITH CAR ON A LEVEL FLOOR, BRING ENGINE TO NORMAL OPERATING TEMPERATURE, REMOVE PLUG FROM SIDE OF BOWL AND ADJUST RUNNING FUEL LEVEL TO BE AT LOWER EDGE OF INSPECTION HOLE. TIGHTEN LOCKNUT AND REPLACE SIGHT PLUG.

2. **PUMP ADJUSTMENT.** (A) WITH PUMP CAM (SEE FIG. 4) IN NO. 1 POSITION (62-64 RAMBLER AND WILLYS NO. 2 POSITION) (B) (SEE FIG. 2). THROTTLE HELD IN WIDE OPEN POSITION AND THE PUMP OPERATING ARM HELD IN A FULLY COMPRESSED POSITION, CHECK THE CLEARANCE BETWEEN THE ADJUSTING NUT AND THE PUMP OPERATING ARM. THE CLEARANCE SHOULD BE .015. TO ADJUST, TURN SCREW.

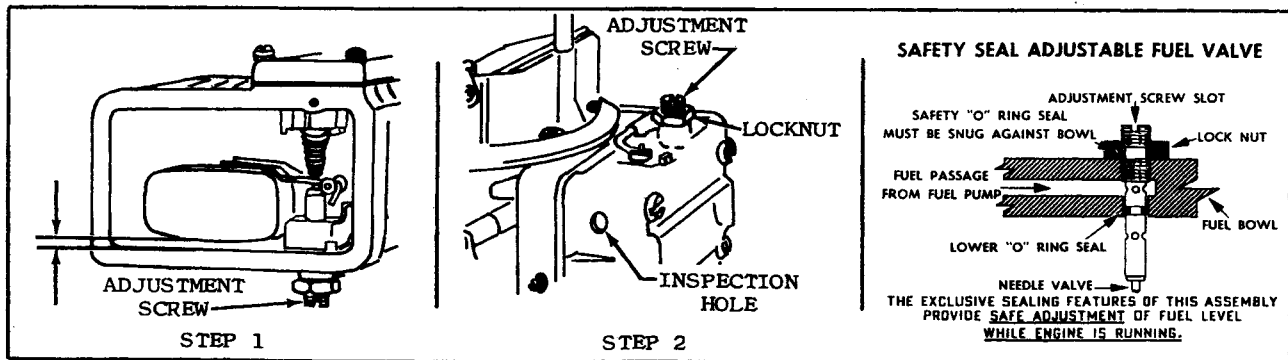
3. **BOWL VENT ADJUSTMENT:** WITH THROTTLE VALVE FULLY CLOSED, DISTANCE BETWEEN TOP OF FUEL BOWL AND VENT BUTTON SHOULD BE 1/16". TO ADJUST, BEND VENT ARM AT ACCELERATING PUMP LEVER. CAUTION: FORD AND MERCURY NO ADJUSTMENT REQUIRED. (SEE FIG. 3).

4. **AUTOMATIC CHOKE SETTING:** ALIGN MARK ON STAT COIL WITH INDEX ON CHOKE HOUSING, ALLOWABLE VARIATIONS, 2 MARKS EITHER WAY FROM INDEX.

5. **SLOW IDLE ADJUSTMENT:** ENGINE AT OPERATING TEMP., AND CHOKE WIDE OPEN, ADJUST IDLE MIXTURE NEEDLES (15) TO A SMOOTH IDLE. ADJUST IDLE STOP SCREW TO 500-550 R.P.M. (SEE FIG. 4).

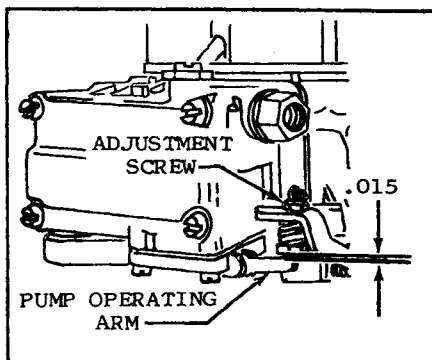
6. **FAST IDLE ADJUSTMENT:** PLACE FAST IDLE SCREW ON HIGH STEP OF FAST IDLE CAM AND SET TO 1600-1700 R.P.M. (SEE FIG. 5).

7. **DASHPOT ADJUSTMENT:** THIS ADJUSTMENT IS MADE WITH CARBURETOR SET AT PROPER IDLE SPEED. DEPRESS DASHPOT PLUNGER FULLY. THE DISTANCE BETWEEN THE PLUNGER AND THROTTLE LEVER SHOULD BE 5/64". TO ADJUST, LOOSEN LOCKNUT AND ROTATE DASHPOT ASSEMBLY. RETIGHTEN LOCKNUT. (SEE FIG. 3).

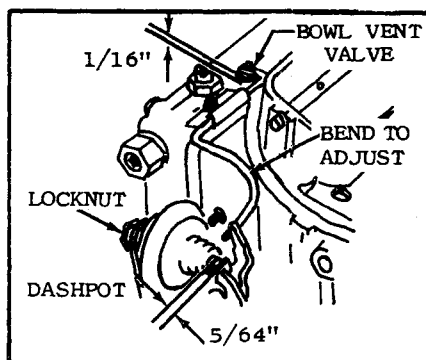


FLOAT LEVEL ADJUSTMENT

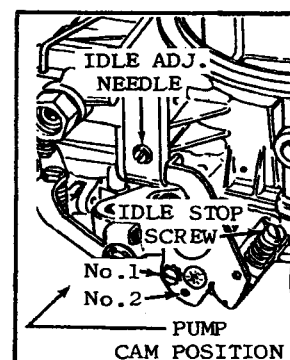
Fig. 1



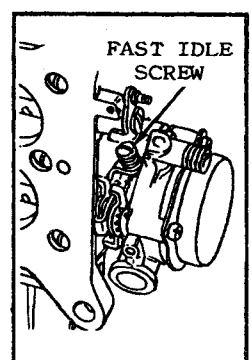
PUMP ADJUSTMENT Fig. 2



BOWL VENT AND DASHPOT ADJUSTMENT Fig. 3



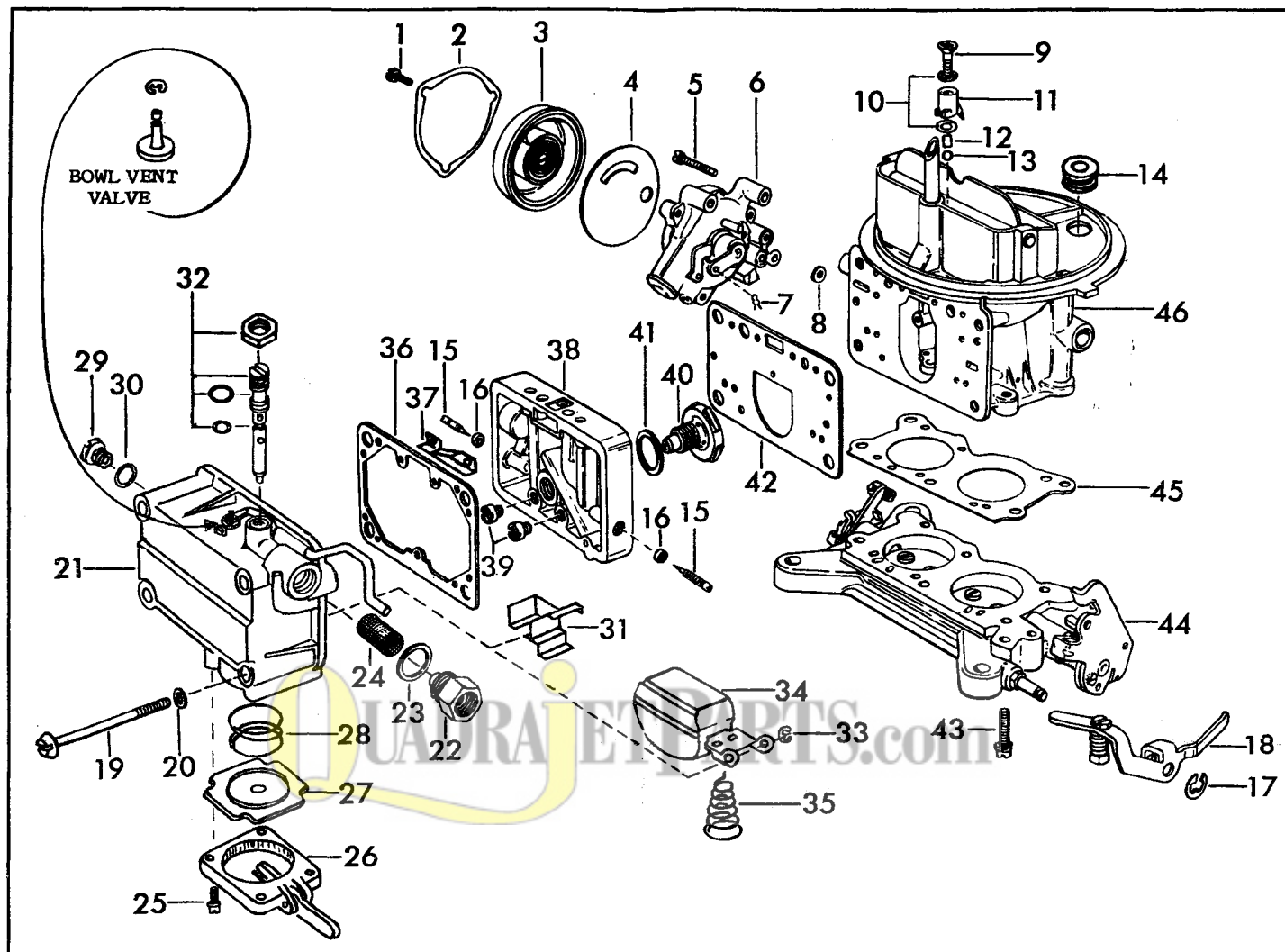
SLOW IDLE ADJUSTMENT Fig. 4



FAST IDLE ADJUSTMENT Fig. 5

GENERAL EXPLODED VIEW

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



NOMENCLATURE

REF.
NO.

1. SCREW-STAT COVER
2. CLAMP-STAT COVER
3. STAT COVER
4. GASKET-STAT COVER
5. SCREW & LOCKWASHER-CHOKE HOUSING ASSY.
6. CHOKE HOUSING ASSY.
7. RETAINER-CHOKE ROD LOWER
8. GASKET-CHOKE HOUSING
9. SCREW-PUMP DISCHARGE NOZZLE
10. GASKETS-PUMP DISCHARGE NOZZLE
11. NOZZLE-PUMP DISCHARGE
12. WEIGHT-PUMP CHECK BALL
13. BALL-PUMP DISCHARGE CHECK
14. GROMMET-COLD AIR CHOKE TUBE
15. NEEDLE-IDLE ADJUSTING
16. SEAL-IDLE NEEDLE
17. RETAINER-PUMP OPERATING LEVER
18. LEVER-PUMP OPERATING
19. SCREW-FUEL BOWL
20. GASKET-FUEL BOWL SCREW
21. FUEL BOWL ASSEMBLY
22. FITTING-FUEL INLET
23. GASKET-FUEL INLET FITTING
24. SCREEN-FUEL INLET

REF.
NO.

25. SCREW & LOCKWASHER-PUMP COVER
26. PUMP COVER ASSEMBLY
27. DIAPHRAGM-PUMP
28. SPRING-DIAPHRAGM RETURN
29. PLUG-FUEL LEVEL
30. GASKET-FUEL LEVEL PLUG
31. BAFFLE PLATE
32. NEEDLE, SEAT, O-RINGS & NUT ASSEMBLY
33. RETAINER-FLOAT
34. FLOAT ASSEMBLY
35. SPRING-FLOAT
36. GASKET-FUEL BOWL
37. BAFFLE-METERING BODY VENT
38. BODY-MAIN METERING
39. MAIN JETS
40. POWER VALVE
41. GASKET-POWER VALVE
42. GASKET-METERING BODY
43. SCREW & LOCKWASHER-THROTTLE BODY
44. THROTTLE BODY ASSEMBLY
45. GASKET-THROTTLE BODY
46. MAIN BODY ASSEMBLY

INSTRUCTION SHEET

HOLLEY CARBURETOR—MODEL 2300,-C HIGH PERFORMANCE THREE 2 BARREL

USE THIS INSTRUCTION SHEET WITH SHEET NO. 50-301

SECONDARY CARBURETORS (FRONT & REAR) ARE SIMILAR IN DESIGN TO PRIMARY CARBURETOR (CENTER), EXCEPT THAT NO CHOKE VALVE, POWER ENRICHMENT SYSTEM, OR ACCELERATING PUMP IS USED.

SECONDARY DIAPHRAGM HOUSING ASSEMBLY - REMOVE FROM CARBURETOR BODY AS AN ASSEMBLY. CHECK FOR LEAKS BY PRESSING IN ON ROD AND HOLDING FINGER OVER VACUUM HOLE, THEN RELEASE ROD. ROD SHOULD REMAIN IN; IF ROD MOVES OUT, REPLACE DIAPHRAGM. DO NOT SOAK DIAPHRAGM IN SOLVENT OR CARBURETOR CLEANER.

FLOAT LEVEL ADJUSTMENT

STEP 1 - WITH FUEL BOWL IN AN INVERTED POSITION, MEASURE DISTANCE FROM TOP OF FLOAT AT ENDS TO THE INNER SURFACE OF FUEL BOWL. TO ADJUST TURN ADJUSTING SCREW, THEN TIGHTEN LOCKNUT SNUGLY. (SEE DATA TABLE FOR MEASUREMENT.) *1970 AND LATER CENTER FLOAT IN INVERTED BOWL.

STEP 2 - WITH CAR ON A LEVEL FLOOR, BRING ENGINE TO NORMAL OPERATING TEMPERATURE. REMOVE PLUG FROM SIDE OF BOWL AND ADJUST RUNNING FUEL LEVEL TO BE AT LOWER EDGE OF INSPECTION HOLE. NOTE: WHEN CHECKING FUEL LEVEL ON SECONDARY CARBURETORS, PRIMARY THROTTLE VALVES SHOULD BE OPENED SLIGHTLY AND SECONDARY CARBURETOR THROTTLE HAND OPERATED TO ASSURE STABILIZED FUEL LEVEL IN SECONDARY FLOAT BOWL.

UNLOADER ADJUSTMENT

PRIMARY CARBURETOR - HOLD THROTTLE LEVER IN WIDE OPEN POSITION, MOVE CHOKE VALVE TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL. ADJUST BY BENDING CHOKE ROD AT OFFSET BEND. (SEE DATA TABLE FOR MEASUREMENT.)

VACUUM BREAK ADJUSTMENT

PRIMARY CARBURETOR - HOLD VACUUM BREAK STEM IN AGAINST STOP. CLOSE CHOKE VALVE BY PRESSING ON INTERMEDIATE CHOKE LEVER SO VACUUM BREAK CONNECTOR ROD IS AT END OF SLOT IN LEVER. MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL. ADJUST BY BENDING VACUUM BREAK CONNECTOR ROD. (SEE DATA TABLE FOR MEASUREMENT.)

DATA TABLE

MAKE	DRY FLOAT LEVEL	PUMP ADJ.	BOWL VENT ADJ.	UNLOADER ADJ.	VACUUM BREAK ADJ.	SLOW IDLE		FAST IDLE	
						R.P.M. S/T	ADJ. A/T-DR.	R.P.M.	ADJ.
CORVETTE 1967-68 1969	3/8"	.015	--	1/4"	1/4"	750	600	2200	H/S
	3/8"	.015	3/32"	1/4"	1/4"	400	H.P.ENG.	2200	H/S
						800	600		
						435	H.P.ENG.	2200	H/S
						750	750	2200	H/S
CHRYSLER CORP. 1969	S/T 9/16"	.015	3/32"	5/32"	9/64"	1000		2200	2/S
	A/T						900N.	1800	2/S
FRONT & REAR 1970	ALL/T 3/4"	--	--	--	--	--	--	--	--
	A/T *	.015	3/32"	5/32"	1/16"		900N.	1800	2/S
1971 340"ENG.	S/T *	.015	3/32"	5/32"	9/64"	900		2200	2/S
	A/T *	.015	3/32"	5/32"	3/64"	950		2600	H/S
440"ENG.	S/T *	.015	3/32"	5/32"	9/64"	900	1000N.	2800	H/S
	A/T *	.015	3/32"	5/32"	1/16"		900N.	1800	H/S

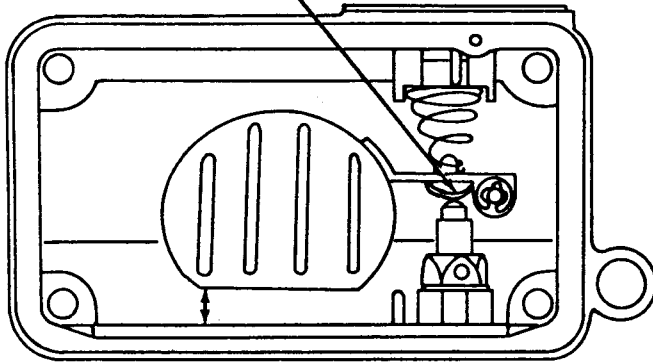
INSTRUCTION SHEET

HOLLEY CARBURETOR—MODEL 3160,4150,-C,4160

HIGH PERFORMANCE

USE THIS INSTRUCTION SHEET WITH SHEET NO. 50-312

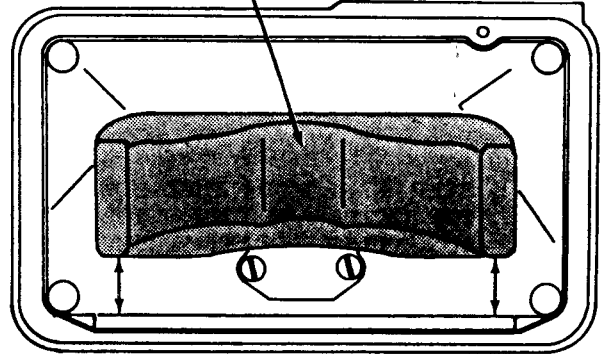
② TO ADJUST BEND TAB.



END HINGED FLOAT ADJUSTMENT

CAUTION
DO NOT EXERT PRESSURE
ON RESILIENT NEEDLE
VALVE.

② TO ADJUST: PUSH LIGHTLY IN ON CENTER OF FLOAT TO RAISE FLOAT. PULL OUT AT CENTER TO LOWER FLOAT.



SIDE HINGED FLOAT ADJUSTMENT

① FUEL BOWL INVERTED, WEIGHT OF FLOAT RESTING ON SEATED NEEDLE. MEASURE DISTANCE BETWEEN TOE OF FLOAT AND SURFACE OF BOWL DIRECTLY BELOW THE FLOAT.

① FUEL BOWL INVERTED, WEIGHT OF FLOAT RESTING ON SEATED NEEDLE. MEASURE DISTANCE BETWEEN TOP OF FLOAT AND SURFACE OF BOWL DIRECTLY BELOW THE FLOAT. CHECK AT BOTH ENDS.

DATA TABLE

NON-ADJUSTABLE NEEDLE AND SEAT DRY FLOAT SETTINGS

MAKE	PRIMARY FLOAT SETTING	SECONDARY FLOAT SETTING
1965-66 CHEVELLE 8 CYL. 425 H.P. 396" ENG.	3/8"	1/2"
1966 CHEVELLE 8 CYL. 375 H.P. 396" ENG.	11/32"	15/32"
1966-67 CHEVELLE 8 CYL. 325 & 350 H.P. 327" ENG.	5/16"	9/32"
1967 CHEVELLE 8 CYL. 355 H.P. 396" ENG.	11/32"	11/32"
1964 CHRYSLER 8 CYL. HEMI-CHARGER 426" ENG.	7/16"	9/16"
1967-70 CHRYSLER 8 CYL. 383" & 440" ENG.	1/4"	9/32"
1967 COMET 8 CYL. HI RISER RACE ENG. 427" ENG.	3/8"	1/2"
1965 CORVETTE 8 CYL. 427" ENG.	3/8"	1/2"
1966 CORVETTE 8 CYL. 390 & 450 H.P. 427" ENG.	11/32"	15/32"
1967 CORVETTE 8 CYL. 300 & 350 H.P. 327" ENG.	5/16"	11/32"
390 H.P. 427" ENG.	5/16"	11/32"
1964 DODGE 8 CYL. HEMI-CHARGER 426" ENG.	7/16"	9/16"
1967-69 DODGE 8 CYL. 383" & 440" ENG.	1/4"	9/32"
1964-68 FORD 8 CYL. HI RISER RACE ENG. 427" ENG.	3/8"	1/2"
1965-67 MUSTANG 8 CYL. COBRA, GT350 289" ENG.	3/8"	1/2"
1964 PLYMOUTH 8 CYL. HEMI-CHARGER 426" ENG.	7/16"	9/16"
1967-69 PLYMOUTH 8 CYL. 383" & 440" ENG.	1/4"	9/32"