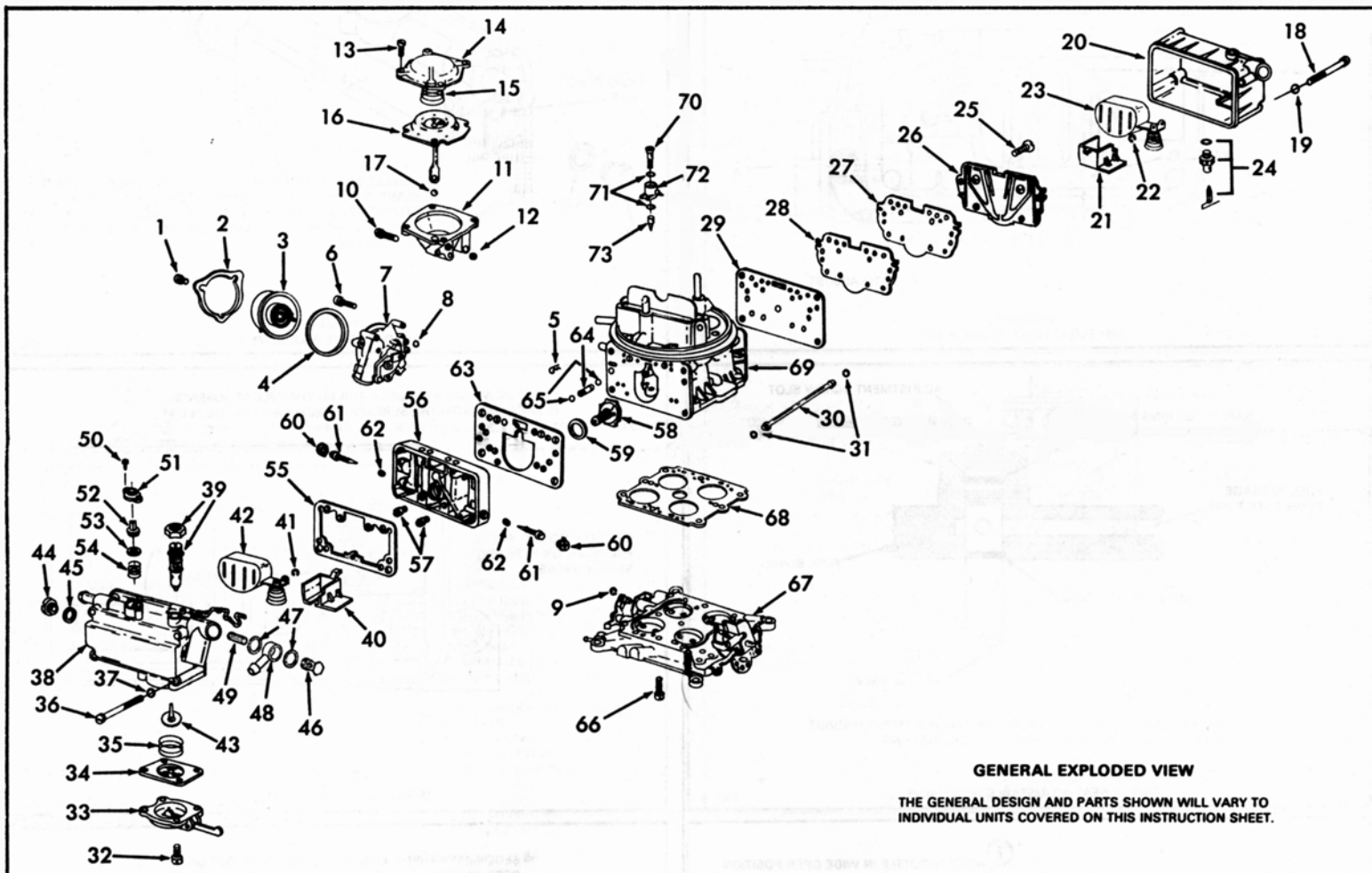


# INSTRUCTION SHEET HOLLEY CARBURETOR - MODEL 4160C

(FORD 4V REPLACEMENT)



**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.

## NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3) - RETAINER	37. GASKET (4) - PRI. BOWL SCREW
2. RETAINER - CHOKE COVER	38. BOWL - PRI. FUEL
3. CHOKE COVER ASSY.	39. NEEDLE & SEAT ASSY.
4. GASKET - CHOKE COVER	40. BAFFLE - PRI. FUEL
5. RETAINER - CHOKE ROD	41. RETAINER - FLOAT
6. SCREW & LOCKWASHER (3) - CHOKE HOUSING	42. FLOAT & SPRING ASSY. - PRI.
7. CHOKE HOUSING ASSY.	43. VALVE - PUMP INTAKE
8. GASKET - CHOKE HOUSING	44. PLUG - SIGHT
9. RETAINER - SEC. DIAPHRAGM LINK	45. GASKET - SIGHT PLUG
10. SCREW & LOCKWASHER (3) - SEC. DIAPHRAGM ASSY.	46. BOLT - BANJO FITTING
11. SEC. DIAPHRAGM HSG. ASSY.	47. GASKET (2) - BANJO FITTING
12. GASKET - SEC. DIAPHRAGM HSG.	48. FUEL INLET FITTING - BANJO
13. SCREW & LOCKWASHER (4) - SEC. DIAPHRAGM COVER	49. SCREEN - FUEL INLET
14. COVER - SEC. DIAPHRAGM	50. SCREW & LOCKWASHER (2) - VENT VALVE COVER
15. SPRING - SEC. DIAPHRAGM	51. COVER - VENT VALVE
16. DIAPHRAGM - SECONDARY	52. STEM - VENT VALVE
17. BALL - SEC. VACUUM CHECK	53. VALVE - VENT
18. SCREW (4) - SEC. FLOAT BOWL	54. SPRING - VENT VALVE
19. GASKET (4) - SEC. BOWL SCREW	55. GASKET - PRI. FUEL BOWL
20. BOWL - SEC. FUEL	56. METERING BODY - PRI.
21. BAFFLE - SEC. FUEL	57. JETS (2) - MAIN
22. RETAINER - FUEL	58. VALVE - PRI. ENRICHMENT
23. FLOAT & SPRING ASSY. - SEC.	59. GASKET - PRI. ENRICHMENT VALVE
24. NEEDLE & SEAT ASSY. - SEC.	60. CAP (2) - IDLE LIMITER
25. SCREW (8) - SEC. METERING BODY	61. NEEDLE (2) - IDLE ADJUSTING
26. METERING BODY - SEC.	62. SEAL (2) - IDLE ADJ. NEEDLE
27. GASKET - METERING BODY	63. GASKET - PRI. METERING BODY
28. PLATE - METERING BODY	64. TUBE - PUMP PASSAGE
29. GASKET - FUEL BOWL & METERING BODY	65. O-RING (2) - TUBE
30. TUBE - FUEL LINE	66. SCREW & LOCKWASHER (6) - THROTTLE BODY
31. O-RING (2) - FUEL LINE TUBE	37. THROTTLE BODY ASSY.
32. SCREW & LOCKWASHER (4) - PUMP COVER	68. GASKET - THROTTLE BODY
33. COVER ASSY. - PUMP DIAPHRAGM	69. MAIN BODY ASSY.
34. PUMP DIAPHRAGM ASSY.	70. SCREW - PUMP NOZZLE
35. SPRING - PUMP DIAPHRAGM	71. GASKET (2) - PUMP NOZZLE
36. SCREW (4) - PRI. FUEL BOWL	72. NOZZLE - PUMP DISC.
	73. NEEDLE - PUMP DISC. CHECK

## CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL USING A COLD IMMERSION TYPE CARBURETOR CLEANER. 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 ASSEMBLIES WITH ATTACHED PLASTIC PARTS FOR A LONG PERIOD OF TIME. DO NOT SOAK ANY PARTS CONTAINING RUBBER, FLOATS, OR DIAPHRAGM ASSYS.

## REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

## SPECIAL INSTRUCTIONS

PRIMARY IDLE ADJUSTING NEEDLES (61) TURN IN UNTIL LIGHTLY SEATED, THEN BACK 1/4 TURN. (DO NOT INSTALL IDLE LIMITER CAPS AT THIS TIME.)

SCREWS LISTED BELOW MUST BE TIGHTENED IN THREE STAGES CROSSWISE TO ARRIVE AT THE CORRECT TORQUE.

THROTTLE BODY GASKET (68)- BE SURE HOLES ARE PROPERLY MATCHED TO THROTTLE BODY. TORQUE THROTTLE BODY SCREWS TO 50 INCH LBS.

ENRICHMENT VALVE (58)- INSTALL WITH GASKET AND TORQUE TO 100 INCH LBS.

PUMP INLET CHECK VALVE (43) - TO INSTALL LUBRICATE TIP OF NEW VALVE AND INSERT IN CENTER HOLE OF PUMP CAVITY. USE NEEDLE NOSE PLIERS AND PULL THRU FROM FUEL BOWL SIDE UNTIL FULLY SEATED. CUT OFF VALVE TIP AT CASTING.

PRI. AND SEC. FUEL BOWL (38) (20) - BEFORE INSTALLING MAKE DRY FLOAT LEVEL ADJUSTMENT. COMPLETE PRIMARY FLOAT ADJUSTMENT AS PER FIG. 2

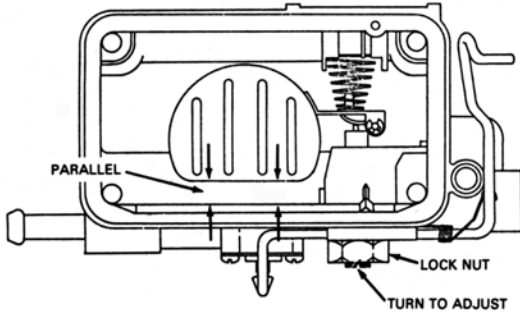
BOWL SCREW INSTALLATION (36)(18)- INSTALL GASKETS(37)(19)ON SCREWS BEFORE INSTALLING, THEN TORQUE EVENLY IN STAGES TO 40 INCH LBS.

FUEL LINE TUBE(30)INSTALL O-RINGS(31) ON THE EXTREME ENDS OF THE TUBE. THEY WILL ROLL ON THE TUBE WHEN INSTALLING THE FUEL BOWLS.

O-RINGS - LUBRICATE LIGHTLY BEFORE INSTALLING.

# ADJUSTMENTS

FLOAT BOWL INVERTED, TURN NEEDLE SEAT ASSY. UNTIL FLOAT SURFACE IS PARALLEL WITH THE SURFACE DIRECTLY BELOW THE FLOAT. TIGHTEN LOCK NUT.

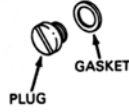


PRIMARY  
DRY FLOAT LEVEL ADJUSTMENT

FIG. 1

LOCK NUT

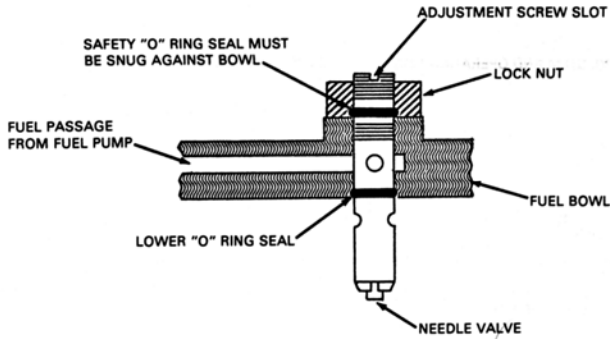
SIGHT PLUG HOLE



1. VEHICLE SETTING ON LEVEL SURFACE AND ENGINE RUNNING.
2. REMOVE SIGHT LEVEL PLUG FROM BOWL.
3. ADJUST NEEDLE SEAT ASSY. SO FUEL LEVEL WILL BE AT BOTTOM EDGE OF SIGHT PLUG HOLE. (PLUS OR MINUS 1/32" TOLERANCE.)
4. TIGHTEN LOCK NUT.

PRIMARY  
WET FLOAT LEVEL ADJUSTMENT

FIG. 2



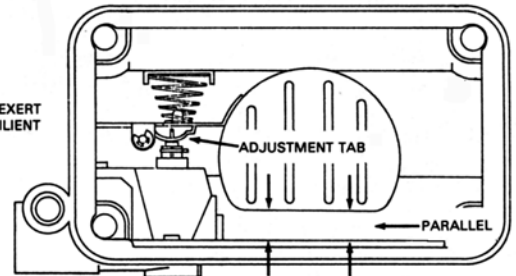
THE EXCLUSIVE SEALING FEATURES OF THIS ASSEMBLY PROVIDE SAFE ADJ. OF FUEL LEVEL WHILE ENGINE IS RUNNING.

SAFETY SEAL ADJUSTABLE FUEL VALVE

FIG. 3

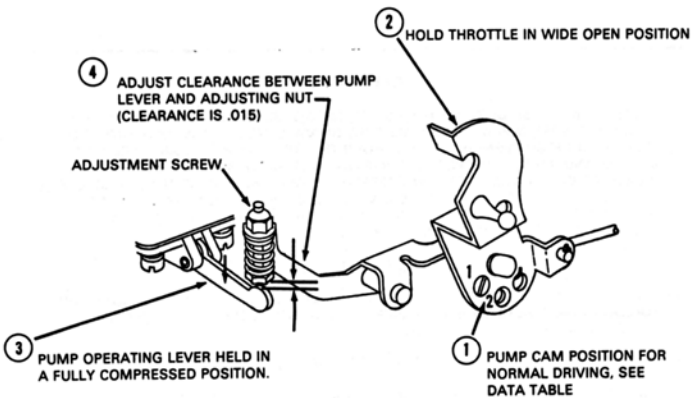
FLOAT BOWL INVERTED BEND TAB SO THAT FLOAT SURFACE IS PARALLEL WITH THE SURFACE DIRECTLY BELOW THE FLOAT.

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.



SECONDARY  
DRY FLOAT LEVEL ADJUSTMENT

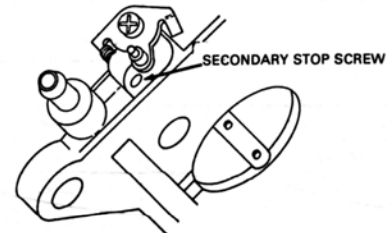
FIG. 4



PUMP ADJUSTMENT

FIG. 5

SECONDARY THROTTLE STOP SCREW. BACK OUT UNTIL SECONDARY PLATES ARE CLOSED. TURN SCREW IN UNTIL IT CONTACTS STOP, THEN TURN SCREW IN 1/2 TURN MORE.

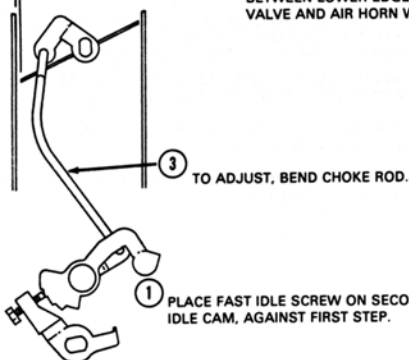


SECONDARY THROTTLE STOP ADJUSTMENT

FIG. 6

CLEARANCE .240" +/- .020"

2 HOLD CHOKE TOWARDS THE CLOSED POSITION THEN MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL.



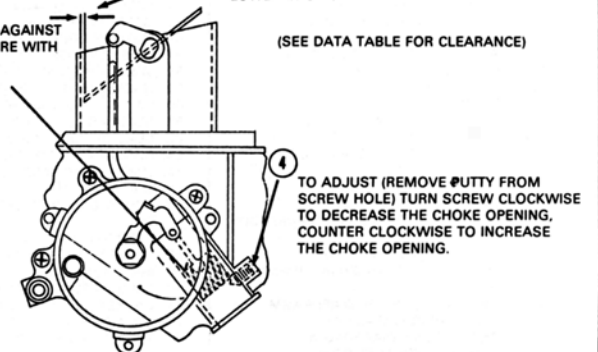
FAST IDLE CAM INDEX ADJUSTMENT

FIG. 7

1 BLOCK PRIMARY THROTTLE ABOUT HALF OPEN.

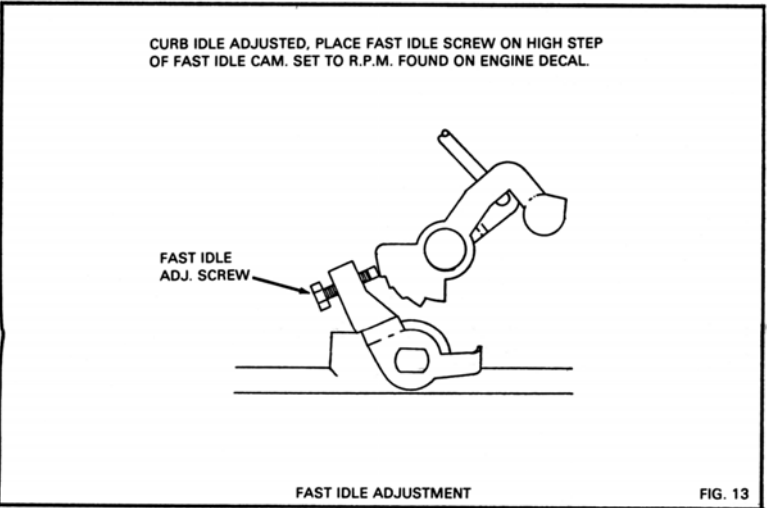
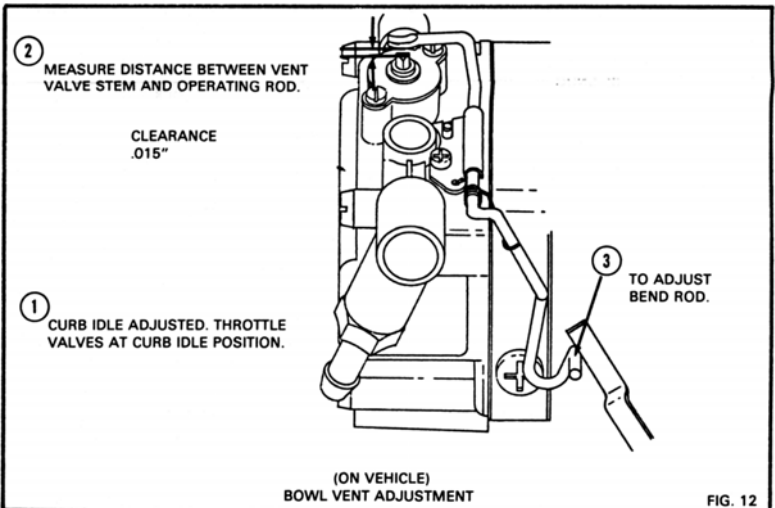
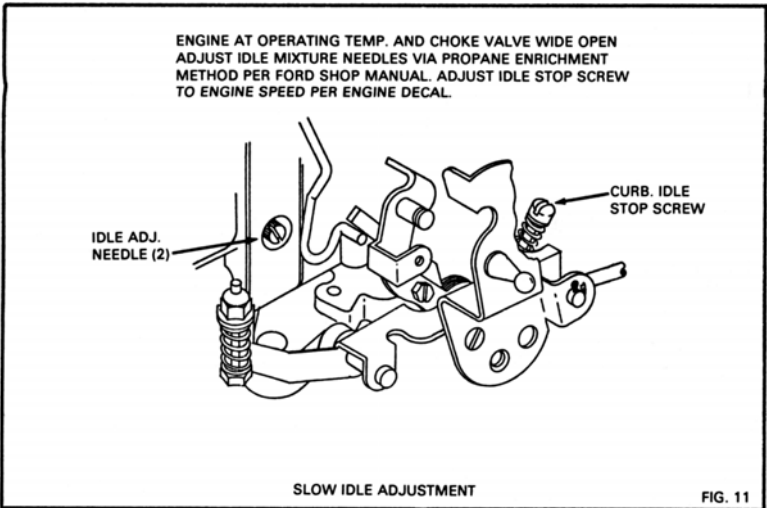
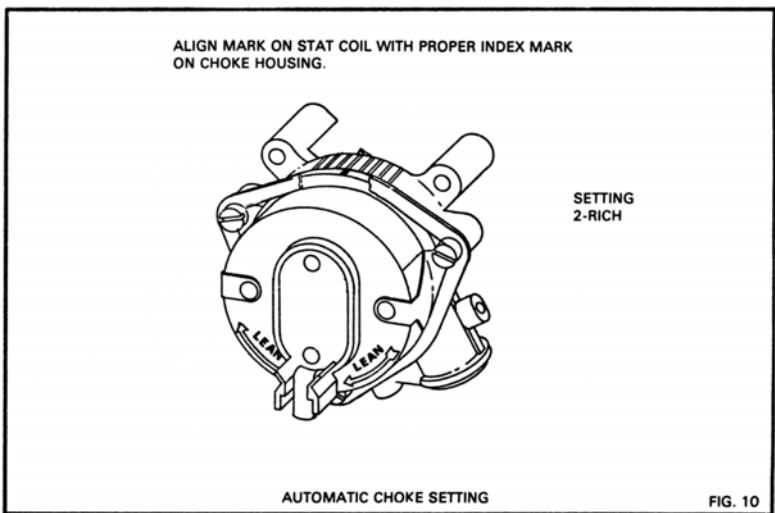
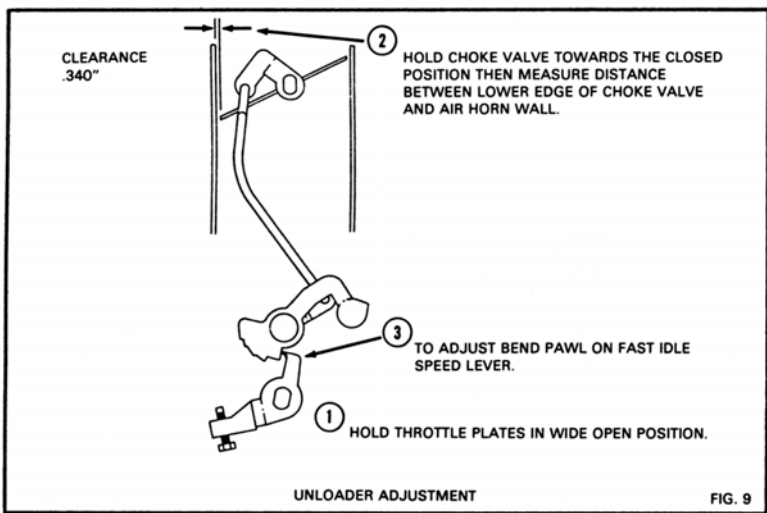
2 PUSH CHOKE PISTON DOWNWARD AGAINST ADJUSTMENT SCREW. (USING A WIRE WITH AN 1/8" BEND AT THE END.)

3 HOLD CHOKE VALVE TOWARDS THE CLOSED POSITION THEN MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE & AIR HORN WALL. (SEE DATA TABLE FOR CLEARANCE)



CHOKE PLATE PULLDOWN ADJUSTMENT

FIG. 8



## DATA TABLE

CARBURETOR NO.	PUMP CAM POSITION	CHOKE PULLDOWN CLEARANCE
DBPE-9510-RA	*	.190"
DBPE-9510-TA	1	.240"
DBPE-9510-YA	1	.240"
DBPE-9510-ZA	1	.240"
DBPE-9510-AAA	1	.240"
DBPE-9510-ABA	1	.240"

\*Use #2 Hole in Throttle Lever With #3 Hole in Plastic Cam.