

INSTRUCTION SHEET

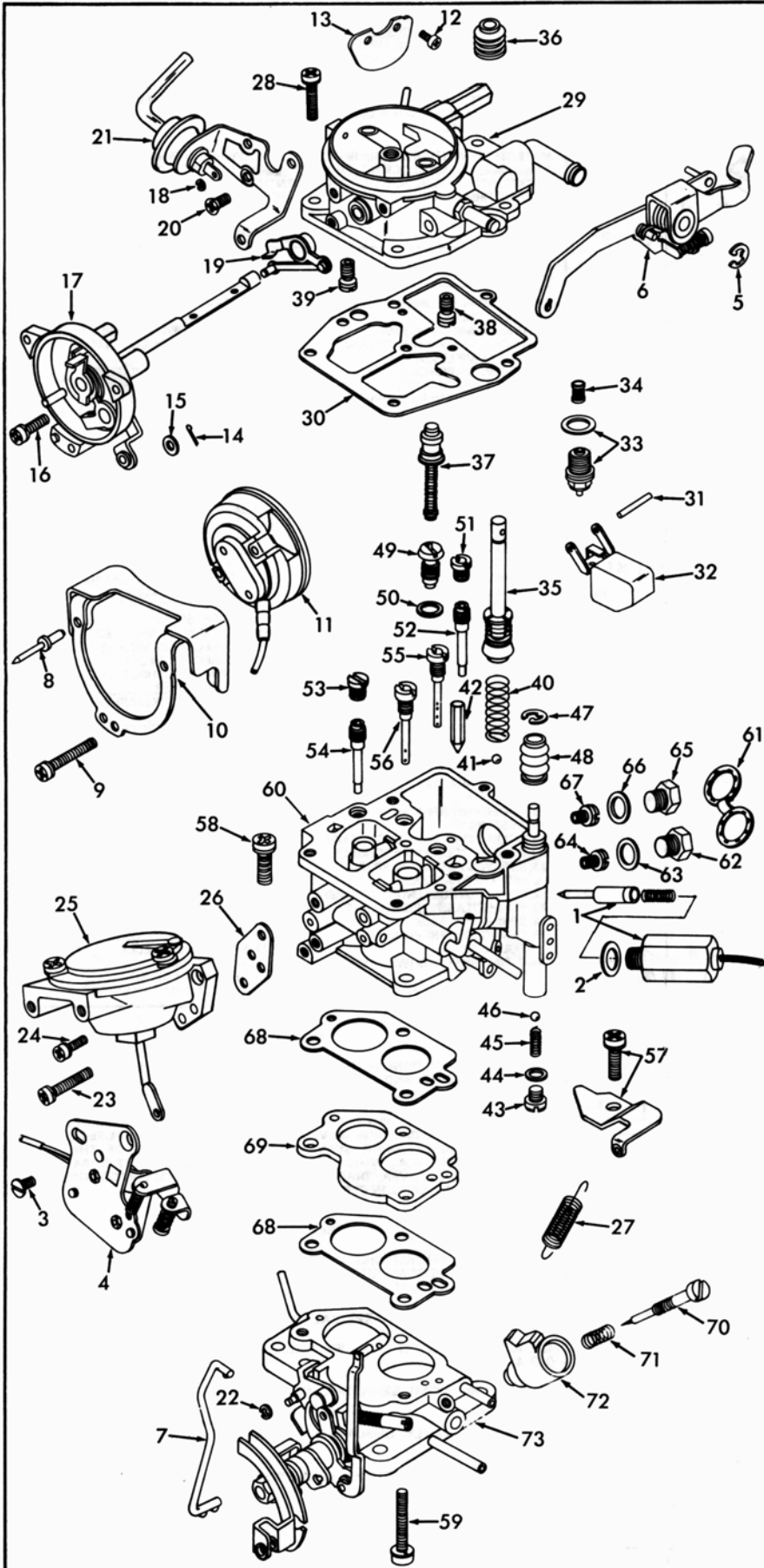
OFF VEHICLE CARBURETOR SERVICE

HITACHI MODEL DCS-306

50-618-3

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. NOTE: DRILL OR CUT OFF. POP RIVET HEADS TO REMOVE CHOKE RETAINER. (IF BREAKAWAY SCREWS WERE USED, SAW A SLOT IN HEAD AND REMOVE WITH SCREW DRIVER.) BEFORE REMOVING CHOKE PLATE SCREWS (12) IT MAY BE NECESSARY TO FILE OFF PEENED END OF SCREWS WHICH WILL BE USED OVER. REMOVE STAKING FROM BOWL COVER FOR EASY REMOVAL OF POWER PISTON ASSY (37). TO GAIN ACCESS TO IDLE MIXTURE NEEDLE (68). SAW OFF 7MM OF SHELL CONTAINING TOP SEAL PLUG. NOTE SIZES OF JETS AND THEIR LOCATION FOR PROPER REASSEMBLY (RECORD SIZES BELOW.)

NOMENCLATURE

REF. NO.	REF. NO.
1. SOLENOID ASSY-IDLE SHUT OFF	39. JET-SEC. SLOW AIR BLEED
2. GASKET-SOLENOID ASSY.	40. SPRING-PUMP RETURN
3. SCREW (2)-IDLE SWITCH ASSY.	41. BALL-PUMP CHECK (NYLON)
4. SWITCH ASSY-IDLE	42. NEEDLE-PUMP DISC. CHECK
5. E CLIP-PUMP LEVER	43. PLUG-SEC. FUEL CUTOFF
6. LEVER ASSY-PUMP	44. GASKET-PLUG
7. ROD-PUMP LEVER	45. SPRING-SEC. FUEL CUTOFF CHECK BALL
8. POP RIVET (2)-RETAINER	46. BALL-SEC. FUEL CUTOFF
9. SCREW TO LOCKWASHER-RETAINER	47. E CLIP-BOOT
10. RETAINER-CHOKE COVER	48. BOOT-SEC. CUTOFF VALVE STEM
11. CHOKE COVER ASSY-ELECTRIC	49. POWER VALVE
12. SCREW (2)-CHOKE VALVE	50. GASKET-POWER VALVE
13. VALVE-CHOKE	51. JET-PRI. SLOW AIR BLEED NO. 2
14. COTTER PIN-FAST IDLE LINK	52. JET-PRI. IDLE (SLOW)
15. WASHER-FAST IDLE LINK	53. JET-SEC. SLOW JET
16. SCREW AND LOCKWASHER (2)-CHOKE COVER HOUSING	54. JET-SEC. SLOW
17. CHOKE HOUSING & SHAFT ASSY.	55. JET-PRI. MAIN AIR BLEED
18. E CLIP-CHOKE PULL OFF LINK	56. JET-SEC. MAIN AIR BLEED
19. LINK & LEVER ASSY-CHOKE PULL OFF	57. SCREW & LOCKWASHER-THROTTLE BODY & BRACKET
20. SCREW-CHOKE PULL OFF BRACKET	58. SCREW & LOCKWASHER-THROTTLE BODY
21. CHOKE PULL OFF ASSY.	59. SCREW & LOCKWASHER (HOLLOW)-THROTTLE BODY
22. E CLIP-SEC. DIAPHRAGM ROD	60. BOWL ASSY.
23. SCREW (2)-SEC. DIAPHRAGM (LONG)	61. RETAINER-PLUG
24. SCREW (1)-SEC. DIAPHRAGM (SHORT)	62. PLUG-PRI. MAIN JET
25. DIAPHRAGM ASSY-SEC. THROTTLE	63. GASKET-PLUG
26. GASKET-SEC. DIAPHRAGM ASSY.	64. JET-PRI. MAIN
27. SPRING-THROTTLE LINK RETURN	65. PLUG-SEC. MAIN JET
28. SCREW & LOCKWASHER (5)-BOWL COVER	66. GASKET-PLUG
29. BOWL COVER ASSY.	67. JET-SEC. MAIN
30. GASKET-BOWL COVER	68. GASKET (2)-THROTTLE BODY
31. PIN-FLOAT	69. SPACER-THROTTLE BODY
32. FLOAT & LEVER ASSY.	70. NEEDLE-IDLE MIXTURE ADJUSTING
33. NEEDLE & SEAT ASSY.	71. SPRING-IDLE MIXTURE NEEDLE
34. SCREEN-FUEL INLET	72. SHELL-IDLE MIXTURE NEEDLE
35. PUMP ASSY.	73. THROTTLE BODY ASSY.
36. BOOT-PUMP	
37. POWER PISTON ASSY.	
38. JET-PRI. SLOW AIR BLEED NO.1	

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL CARBON DEPOSITS. WASH OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: BE VERY CAREFUL NOT TO LEAVE FUEL BOWL ASSY. (60) IN CLEANING SOLVENT TOO LONG BECAUSE OF THE GLASS WINDOW RUBBER SEAL WHICH IS NOT REPLACEABLE. DO NOT SOAK FLOAT, ELECTRIC CHOKE COVER, DIAPHRAGM ASSEMBLIES, SOLENOIDS OR PARTS WITH RUBBER MATERIAL IN CLEANING SOLVENTS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE (70)-TURN NEEDLE IN UNTIL LIGHTLY SEATED, THEN BACK OUT 4 TURNS.

PUMP RETURN SPRING (40)-INSTALL WITH CROSS WIRE TO THE BOTTOM OF PUMP CYLINDER.

POWER PISTON (37)-AFTER INSTALLING LIGHTLY RESTAKE CASTING AROUND WASHER.

CHOKE COVER (11)-WHEN INSTALLING, BE SURE LEVER ON CHOKE SHAFT IS PROPERLY INSERTED IN HOOK ON CHOKE COIL SPRING. (NON-ADJUSTABLE).

INSTRUCTION SHEET

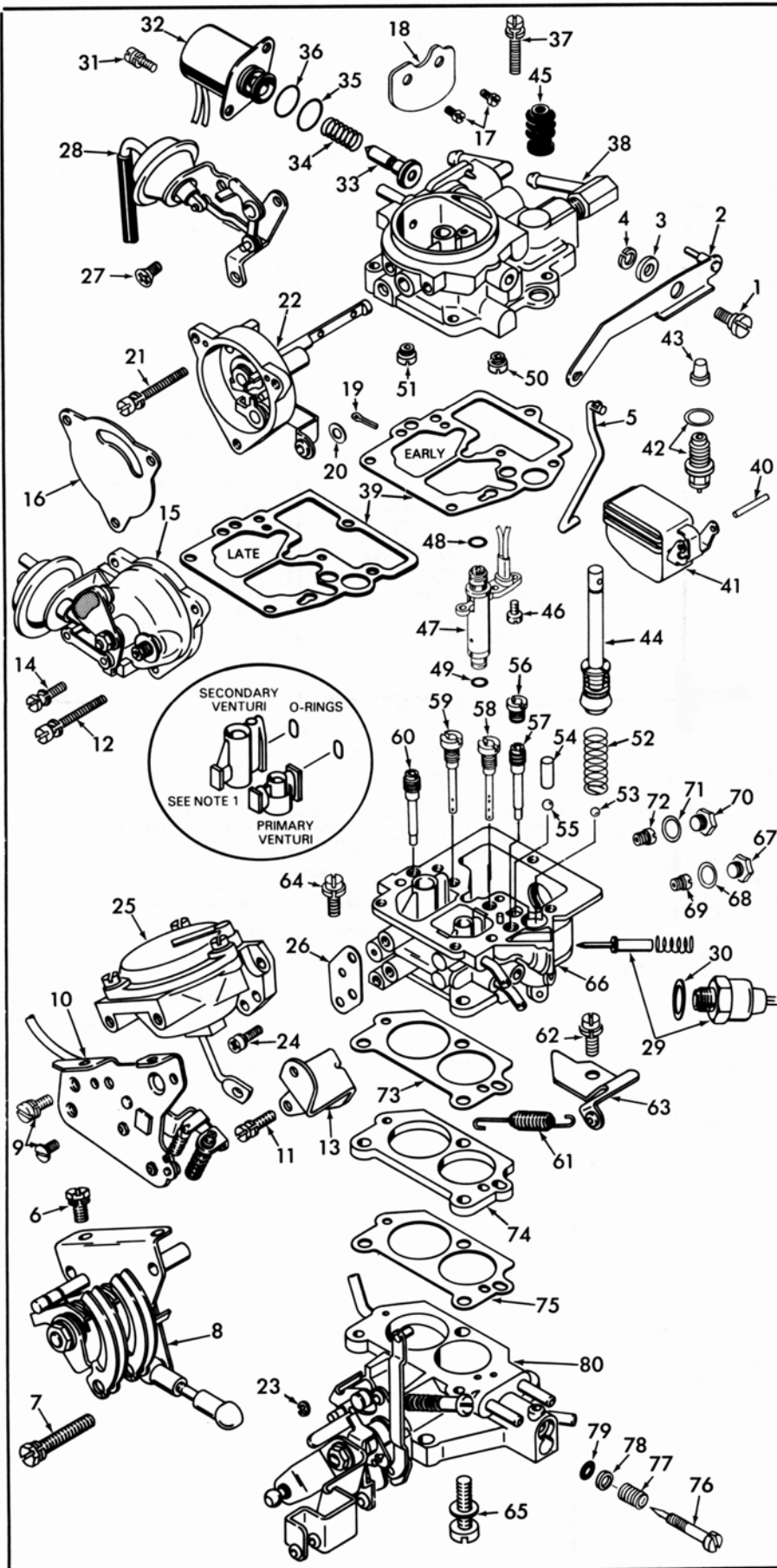
OFF VEHICLE CARBURETOR SERVICE

HITACHI MODEL DFP-306 (A/F SOLENOID)

1983-85 MAZDA F.W.D.

GENERAL EXPLODED VIEW

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



DISASSEMBLY

USE THE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. REMOVE WIRES FROM CARBURETOR HARNESS CONNECTOR WHERE NECESSARY, USING PROPER TOOL AND IDENTIFY WIRE LOCATION FOR PROPER REASSEMBLY. CAUTION: ORIGINAL SCREWS HAVE LOCK TIGHT APPLIED TO THEM. TAKE EXTRA CARE IN REMOVING THEM. BEFORE REMOVING CHOKE PLATE SCREWS IT MAY BE NECESSARY TO FILE OFF PEENED END OF SCREWS WHICH WILL BE USED OVER. NOTE SIZES OF ALL JETS AND THEIR LOCATION FOR PROPER REASSEMBLY. RECORD SIZES BELOW. TO REMOVE IDLE ADJUSTING NEEDLE DRIVE SPRING PIN FROM THE BOTTOM SIDE WITH A DRIFT PUNCH FAR ENOUGH SO IDLE ADJUSTING NEEDLE CAN BE REMOVED.

NOTE 1: IF VENTURI'S ARE REMOVED TO REPLACE O-RING SEALS, CAREFULLY REMOVE STAKING LOCKING VENTURI LOCK SCREWS. (MAY ALSO CONTAIN LOCKTIGHT). LOOSEN SCREW, REMOVE VENTURI AND INSTALL NEW O-RING. HOLDING VENTURI FIRMLY IN PLACE, TIGHTEN LOCK SCREW. (RESTAKE).

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW-PUMP LEVER	37. SCREW & LOCKWASHER (5)-BOWL COVER (DIFFERENT LENGTHS)
2. LEVER-PUMP	38. BOWL COVER ASSEMBLY
3. WASHER-PUMP SCREW	39. GASKET-BOWL COVER
4. LOCKWASHER-PUMP SCREW	40. PIN-FLOAT
5. ROD-PUMP LEVER	41. FLOAT & LEVER ASSEMBLY
6. SCREW (2)-BRACKET	42. NEEDLE & SEAT ASSEMBLY
7. SCREW (2)-BRACKET	43. SCREEN-NEEDLE SEAT
8. THROTTLE LEVERS & BRACKET ASSEMBLY	44. PUMP ASSEMBLY
9. SCREW (2)-BRACKET	45. BOOT-PUMP
10. BRACKET & THROTTLE SWITCH ASSEMBLY	46. SCREW & WASHER (3)-SOLENOID ASSEMBLY
11. SCREW (2)-BRACKET CHOKE COVER	47. SOLENOID ASSY.-AIR FUEL RATIO
12. SCREW (1)-CHOKE COVER	48. O-RING (UPPER)-AFR SOLENOID
13. BRACKET-CHOKE COVER	49. O-RING (LOWER)-AFR SOLENOID
14. SCREW (2)-CHOKE COVER ASSY.	50. JET-PRI. SLOW AIR BLEED
15. CHOKE COVER & VAC. PULLOFF ASSEMBLY	51. JET-SEC. SLOW AIR BLEED
16. PLATE-CHOKE COVER	52. SPRING-PUMP RETURN
17. SCREW (2)-CHOKE VALVE	53. BALL (NYLON)-PUMP INTAKE CHECK
18. VALVE-CHOKE	54. WEIGHT-PUMP DISCHARGE
19. COTTER PIN (UPPER) -FAST IDLE LINK	55. BALL-PUMP DISCHARGE CHECK
20. WASHER-FAST IDLE LINK	56. PLUG-PRI. SLOW JET
21. SCREW & LOCKWASHER (2)-CHOKE HOUSING	57. JET-PRI. SLOW
22. CHOKE HOUSING & SHAFT ASSY.	58. JET-PRI. MAIN AIR BLEED
23. E CLIP-SEC.DIAPHRAGM ROD	59. JET-SEC. MAIN AIR BLEED
24. SCREW & LOCKWASHER-DIAPHRAGM ASSEMBLY	60. JET-SEC. SLOW JET
25. SECONDARY THROTTLE DIAPHRAGM ASSEMBLY	61. SPRING-SEC. THROTTLE RETURN LEVER
26. GASKET-SEC. DIAPHRAGM ASSEMBLY	62. SCREW & LOCKWASHER-BRACKET
27. SCREW-BRACKET (CHOKE PULLOFF)	63. BRACKET-RETURN SPRING
28. CHOKE PULLOFF & HOSE ASSEMBLY	64. SCREW & LOCKWASHER-THROTTLE BODY
29. SOLENOID ASSY.-IDLE SHUT OFF	65. SCREW & LOCKWASHER-THROTTLE BODY
30. GASKET-SOLENOID ASSEMBLY	66. BOWL ASSEMBLY
31. SCREW & LOCKWASHER (2)-SOLENOID ASSEMBLY	67. PLUG-PRI. MAIN JET
32. BOWL VENT SOLENOID ASSEMBLY	68. GASKET-PLUG
33. PLUNGER ASSY.-BOWL VENT	69. JET-PRI. MAIN
34. SPRING-PLUNGER	70. PLUG-SEC. MAIN JET
35. O-RING (OUTER)-BOWL VENT SOLENOID	71. GASKET-PLUG
36. O-RING (INNER)-BOWL VENT SOLENOID	72. JET-SEC. MAIN
	73. GASKET-THROTTLE BODY
	74. INSULATOR-THROTTLE BODY
	75. GASKET-THROTTLE BODY
	76. NEEDLE-IDLE ADJUSTING
	77. SPRING-IDLE NEEDLE
	78. WASHER-SEAL
	79. SEAL-IDLE ADJ. NEEDLE
	80. THROTTLE BODY ASSEMBLY

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL CARBON DEPOSITS. WASH OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: BE VERY CAREFUL NOT TO LEAVE FUEL BOWL ASSEMBLY (66) IN CLEANING SOLVENT TOO LONG BECAUSE OF THE GLASS WINDOW RUBBER SEAL WHICH IS NOT REPLACEABLE. DO NOT SOAK FLOAT, ELECTRIC CHOKE COVER, DIAPHRAGM ASSEMBLIES, SOLENOIDS, OR PARTS WITH RUBBER MATERIAL IN CLEANING SOLVENTS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE (76)-TURN NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT 4 TURNS.

PUMP RETURN SPRING (52)-INSTALL WITH CROSS WIRE TO THE BOTTOM OF PUMP CYLINDER.

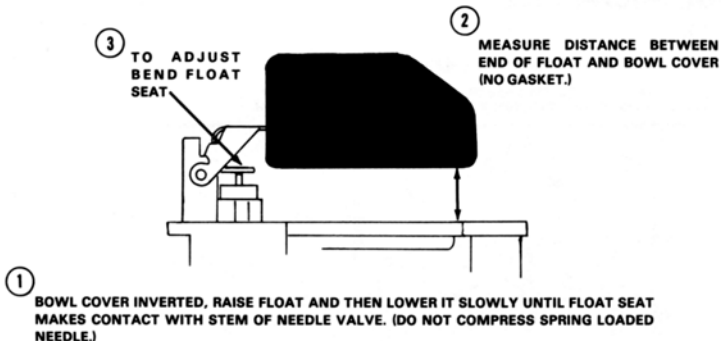
O-RINGS (ALL)-LIGHTLY LUBRICATE O-RINGS BEFORE INSTALLING ASSEMBLY WHERE USED.

CHECK ALL CHOKE ADJUSTMENTS BEFORE INSTALLING CHOKE COVER.

ADJUSTMENTS

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

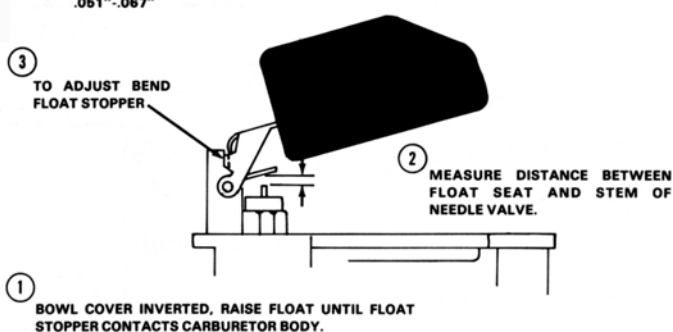
SETTINGS
1981-83, DCS-306 - 11.1MM - 7/16"
1983 - EARLY 84, GLC, DFP-306, 11.1MM - 7/16"
LATE 1984-85, DFP306, 9.5MM - 3/8"



DRY FLOAT LEVEL ADJUSTMENT

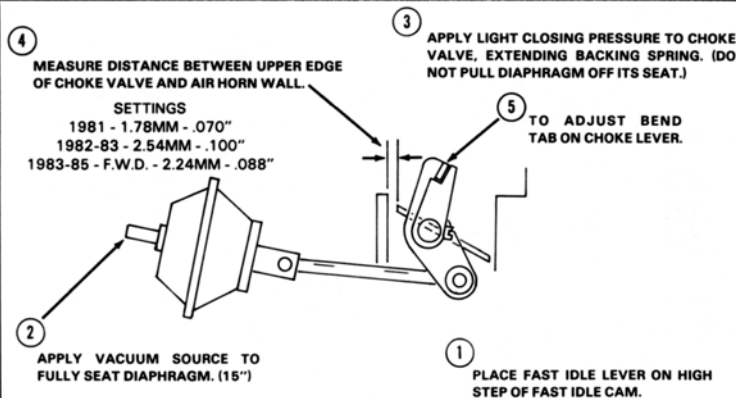
FIG. 1

1981 SETTING
1.30-1.70MM
.051"-.067"



1981
FLOAT DROP ADJUSTMENT

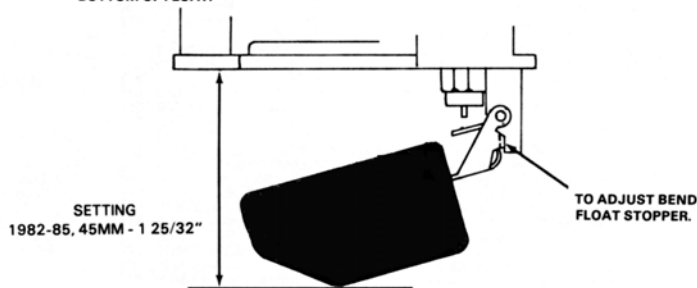
FIG. 2



CHOKE PULLOFF ADJUSTMENT

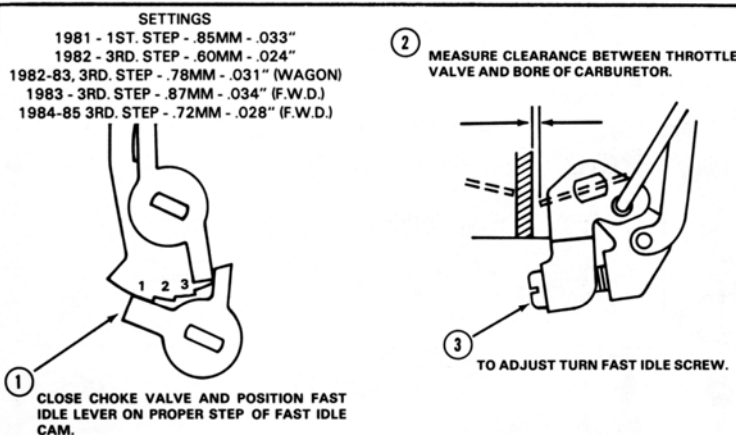
FIG. 3

BOWL COVER HELD IN THE NORMAL POSITION WITH FLOAT HANGING FREELY. MEASURE DISTANCE FROM BOWL COVER GASKET SURFACE TO BOTTOM OF FLOAT.



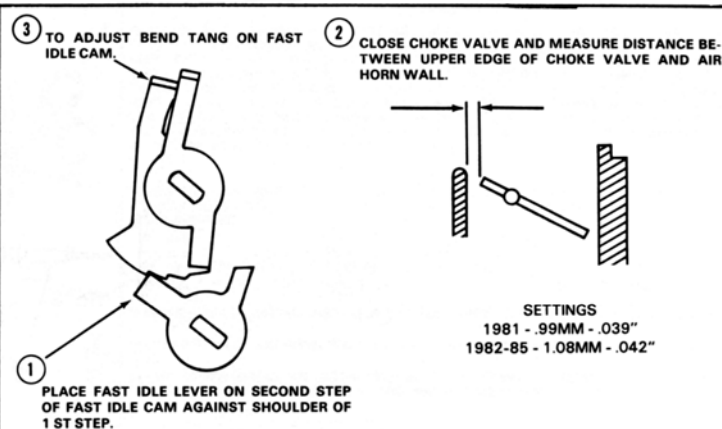
1982-85
FLOAT DROP ADJUSTMENT

FIG. 2A



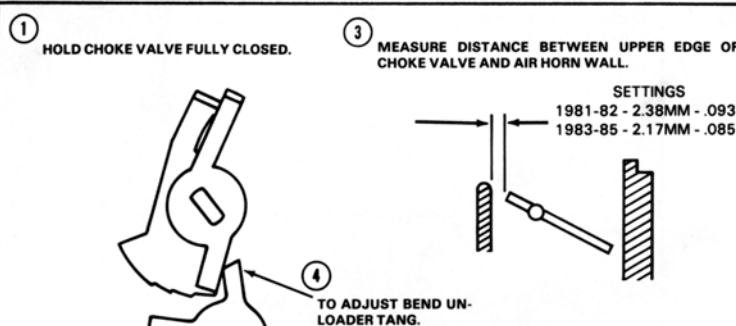
FAST IDLE CAM ADJUSTMENT

FIG. 4



CHOKE VALVE CLEARANCE

FIG. 5



CHOKE UNLOADER ADJUSTMENT

FIG. 6