



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

OFF VEHICLE CARBURETOR SERVICE

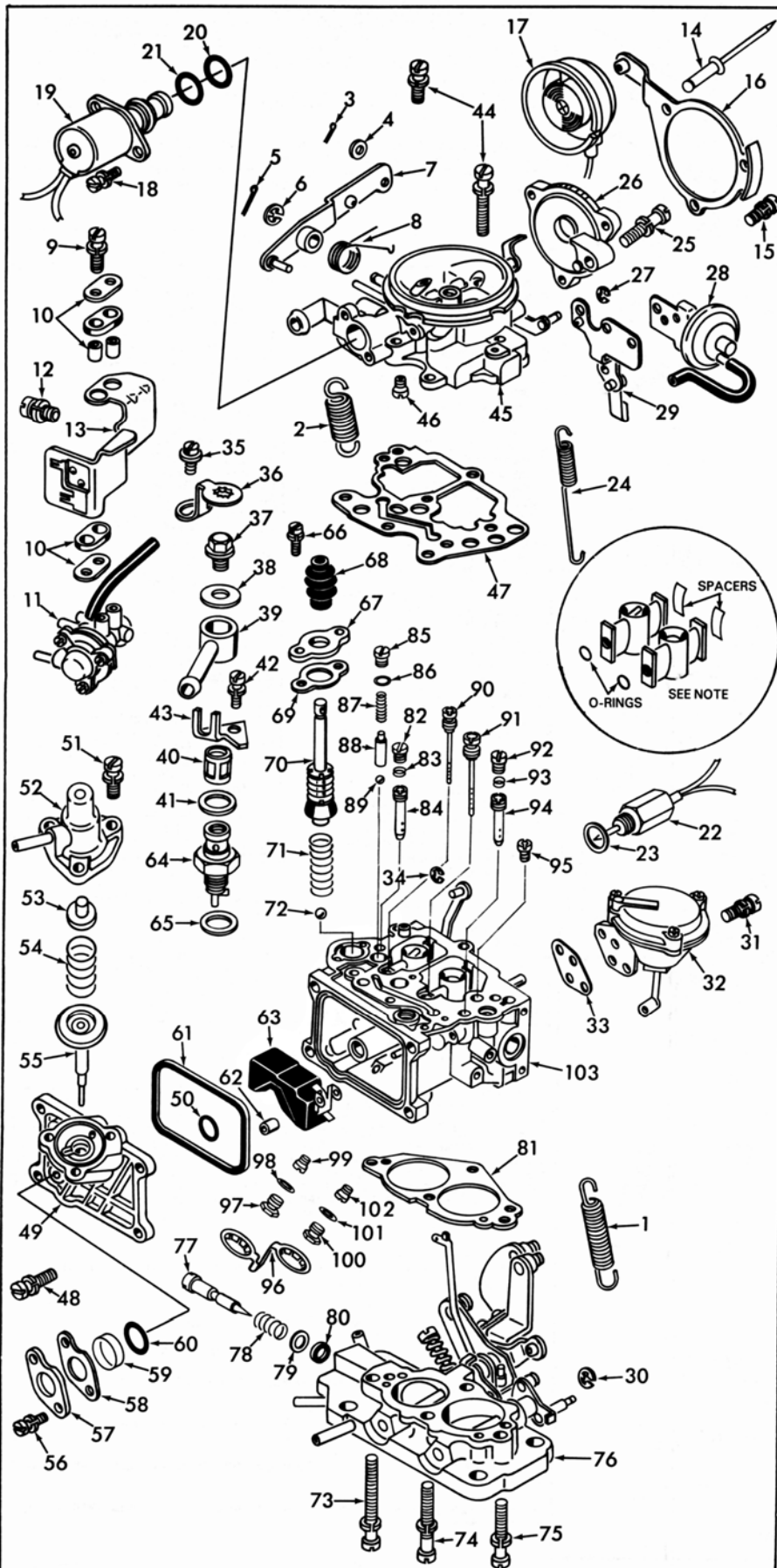
HITACHI MODEL-DCH-340

1.9L ENG CALIF. (SERIES "S" TRUCK)

50-623-1

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. CAUTION: BE CAREFUL TO NOTE SIZES OF ALL JETS AND THEIR LOCATION FOR PROPER ASSEMBLY. RECORD SIZES BELOW. DRILL POP RIVET HEADS OFF TO REMOVE CHOKE COVER AND RETAINER. KNOCK OUT IDLE MIXTURE NEEDLE PLUG BY INSERTING PUNCH THRU SLIT IN BASE OF THROTTLE BODY.

NOMENCLATURE

REF. NO.	REF. NO.
1. SPRING-MAIN RETURN	50. O-RING-PASSAGE SEAL
2. SPRING-ASSIST RETURN	51. SCREW & LKWSHR. (3)-COVER
3. COTTER PIN-PUMP ROD	52. COVER-ACTUATOR SLOW
4. WASHER-PUMP ROD	53. SPACER-COVER
5. COTTER PIN-PUMP LEVER	54. SPRING-ACTUATOR DIAPHRAGM
6. E-CLIP-PUMP LEVER	55. DIAPHRAGM ASSY.-ACTUATOR
7. LEVER-PUMP	56. SCREW & LKWSHR. (2)-COVER
8. SPRING-PUMP LEVER	57. COVER-LEVEL GAUGE
9. SCREW & LKWSHR. (2)-RUBBER MOUNT	58. GASKET-COVER
10. RUBBER MOUNT ASSY.	59. WINDOW-GAUGE
11. ACTUATOR ASSY. & HOSE-SLOW	60. O-RING-WINDOW
12. SCREW & LKWSHR.-BRACKET	61. SEAL-ACTUATOR
13. BRACKET-SLOW-ACTUATOR	62. COLLAR-FLOAT
14. POP RIVET (2)-CHOKE COVER RETAINER	63. FLOAT & LEVER ASSY.
15. SCREW & LKWSHR.-RETAINER	64. NEEDLE & SEAT ASSY.
16. RETAINER-CHOKE COVER	65. GASKET (SERVICE)-NEEDLE SEAT
17. CHOKE COVER ASSY.-ELECTRIC	66. SCREW & LKWSHR. (2)-PUMP PLATE
18. SCREW & LKWSHR. (2)-BOWL VENT SOLENOID	67. PLATE-PUMP
19. BOWL VENT SOLENOID ASSY.	68. BOOT-PUMP
20. O-RING (OUTER)-BOWL VENT SOLENOID	69. GASKET-PUMP PLATE
21. O-RING (INNER)-BOWL VENT SOLENOID	70. PUMP ASSY.
22. SOLENOID ASSY.-ANTI DIESELING	71. SPRING-PUMP RETURN
23. GASKET-SOLENOID	72. BALL-PUMP INTAKE CHECK
24. SPRING-SEC. THROTTLE RETURN	73. SCREW & LKWSHR. (LONG)-THROTTLE BODY
25. SCREW & LKWSHR. (2)-CHOKE HOUSING	74. SCREW & LKWSHR. (HOLLOW)-THROTTLE BODY
26. HOUSING-CHOKE COVER	75. SCREW & LKWSHR. (2)-THROTTLE BODY
27. E-CLIP-PULL OFF LINK	76. THROTTLE BODY ASSY.
28. CHOKE PULL OFF & HOSE ASSY.	77. NEEDLE-IDLE ADJUSTING
29. BRACKET-SEC. RETURN SPRING	78. SPRING-IDLE ADJ. NEEDLE
30. E-CLIP-SEC. DIAPHRAGM ROD	79. WASHER-IDLE NEEDLE SEAL
31. SCREW & LKWSHR. (3)-SEC. DIAPHRAGM ASSY.	80. SEAL-IDLE ADJ. NEEDLE
32. SECONDARY DIAPHRAGM ASSY.	81. GASKET-THROTTLE BODY
33. GASKET-SEC. DIAPHRAGM ASSY.	82. PLUG-PRI. SLOW JET
34. E-CLIP (UPPER)-FAST IDLE LINK	83. SPRING-PRI. SLOW JET
35. SCREW & LKWSHR.-LOCK	84. JET-PRI. SLOW
36. LOCK-NIPPLE BOLT	85. PLUG-PUMP DISC. BALL
37. BOLT-NIPPLE	86. GASKET-PLUG
38. GASKET-BOLT	87. SPRING-BALL WEIGHT
39. NIPPLE-FUEL	88. WEIGHT-BALL
40. SCREEN-FUEL INLET	89. BALL-PUMP DISC.
41. GASKET-NIPPLE (LOWER)	90. JET-PRI. MAIN AIR BLEED
42. SCREW & LKWSHR.-BRACKET	91. JET-Sec. MAIN AIR BLEED
43. BRACKET-FUEL NIPPLE	92. PLUG-Sec. SLOW JET
44. SCREW & LKWSHR. (3)-AIR HORN	93. SPRING-Sec. SLOW JET
45. AIR HORN ASSY.	94. JET-Sec. SLOW
46. JET-PRI. SLOW AIR BLEED	95. JET-Sec. SLOW AIR BLEED
47. GASKET-AIR HORN	96. LOCK TAB-PLUGS
48. SCREW & LKWSHR. (4)-ACTUATOR ASSY.	97. PLUG-PRI. MAIN JET
49. ACTUATOR & LEVEL GAUGE ASSY.	98. GASKET-PLUG
	99. JET-PRI. MAIN
	100. PLUG-Sec. MAIN JET
	101. GASKET-PLUG
	102. JET-Sec. MAIN
	103. BOWL 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 PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY FOR CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK RUBBER PARTS, SOLENOIDS (19), (22), DIAPHRAGM UNITS, (11), (28), (32), (55), FLOAT (63), OR ELECTRIC CHOKE COVER ASSY. (17), IN ANY TYPE OF CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND ADJUSTMENTS.

SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE (77)-TURN NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT 1 1/2 TURNS. (DO NOT INSTALL PLUG AT THIS TIME.)

PUMP RETURN SPRING (71)-INSTALL WITH CROSS WIRE TO THE BOTTOM OF PUMP CYLINDER IN SLOT.

NEEDLE AND SEAT (64)-INSTALL GASKET (65) ON SERVICE NEEDLE SEAT BEFORE INSTALLING.

ACTUATOR AND LEVEL GAUGE SCREWS (48)-TIGHTEN SCREWS DOWN EVENLY. (DO NOT OVER TIGHTEN.)

APPLY LIGHT COATING OF GREASE ON O-RINGS BEFORE INSTALLING.

NOTE: IF NECESSARY TO REMOVE VENTURI'S. REMOVE STAKING LOCKING VENTURI LOCK SCREW, THEN LOOSEN SCREW. VENTURI CAN BE REMOVED TO INSTALL A NEW O-RING SEAL. INSTALL A NEW O-RING THEN HOLDING VENTURI, SPRING SPACER FIRMLY IN PLACE TIGHTEN LOCK SCREW. (RETAKE)

INSTRUCTION SHEET

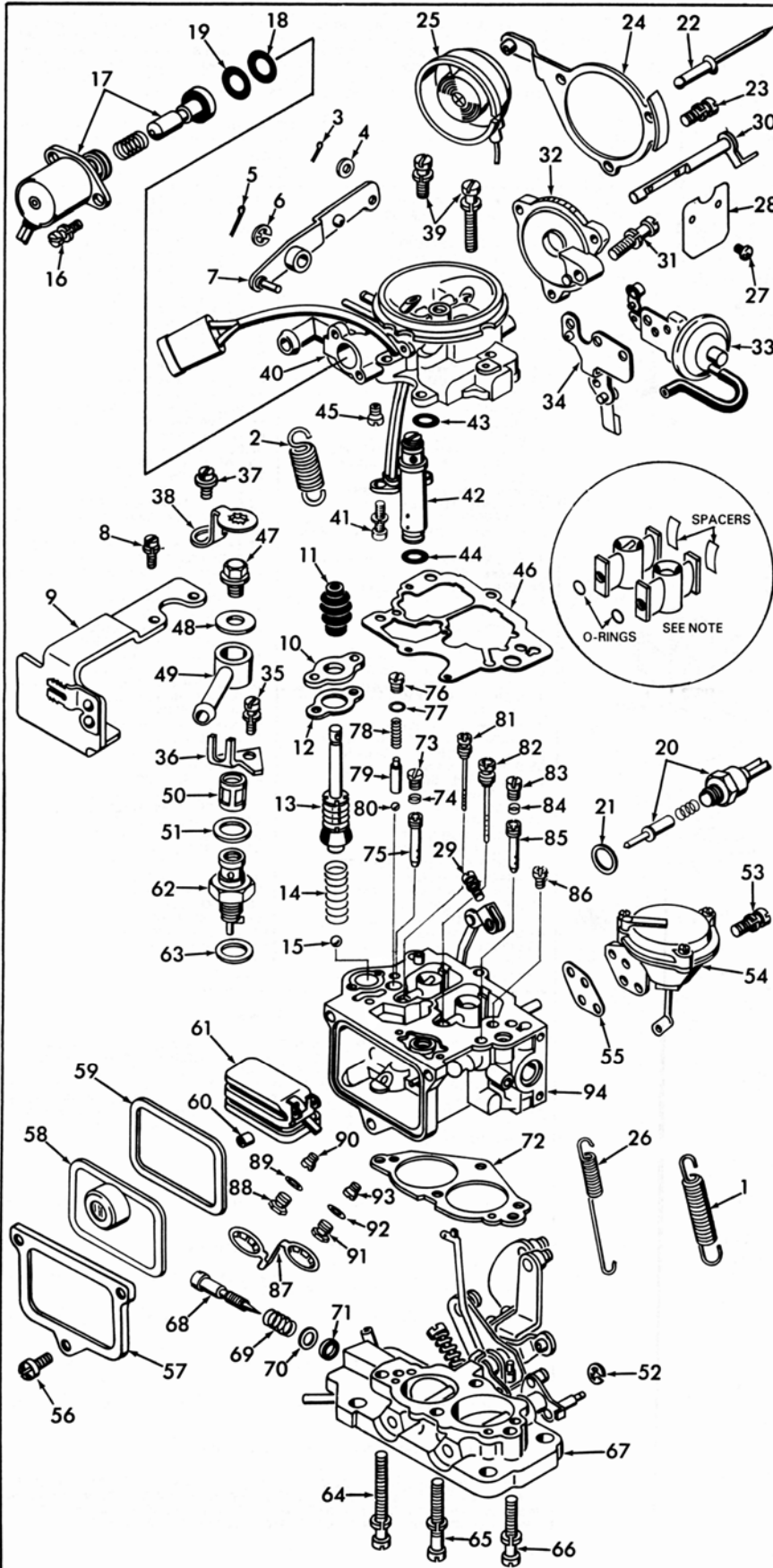
OFF VEHICLE CARBURETOR SERVICE

HITACHI MODEL DFP340

(DUTY CYCLE SOLENOID)

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 DISASSEMBLY UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. SPECIAL NOTES: DISCONNECT ALL WIRE CONNECTORS FROM BRACKET (9). DRILL POP RIVET HEADS OFF TO REMOVE CHOKE COVER AND RETAINER. AIR HORN ASSY. WITH DUTY SOLENOID, REMOVE SOLENOID SCREWS AND CAREFULLY PULL SOLENOID FROM AIR HORN SO O-RINGS CAN BE REPLACED. DO NOT SOAK THIS UNIT IN ANY TYPE OF CLEANER OR SOLVENT. IF IDLE ADJUSTING NEEDLE ACCESS IS PLUGGED CAREFULLY DRILL HOLE IN PLUG THEN USING A PULLER REMOVE PLUG. NOTE SIZES OF ALL JETS AND THEIR LOCATION FOR PROPER ASSEMBLY. RECORD SIZES BELOW.

NOTE: IF NECESSARY TO REMOVE VENTURI'S, REMOVE STAKING LOCKING VENTURI LOCK SCREW. THEN LOOSEN SCREW. VENTURI CAN BE REMOVED TO INSTALL A NEW O-RING SEAL. INSTALL A NEW O-RING THEN HOLDING VENTURI, SPRING SPACER FIRMLY IN PLACE. TIGHTEN LOCK SCREW. (RETAKE.)

NOMENCLATURE

REF. NO.	REF. NO.
1. SPRING-MAIN RETURN	45. JET-PRI. SLOW AIR BLEED
2. SPRING-ASSIST RETURN	46. GASKET-AIR HORN
3. COTTER PIN-PUMP ROD	47. BOLT-NIPPLE
4. WASHER-PUMP ROD	48. GASKET-BOLT
5. COTTER PIN-PUMP LEVER	49. NIPPLE-FUEL
6. E-CLIP-PUMP LEVER	50. SCREEN-FUEL INLET
7. LEVER-PUMP	51. GASKET-NIPPLE (LOWER)
8. SCREW & LOCKWASHER (2)-BRACKET	52. E-CLIP-SEC. DIAPHRAGM ROD
9. BRACKET-PUMP, LOOM SOCKET	53. SCREW & LOCKWASHER (3)-SEC. DIAPHRAGM ASSY.
10. PLATE-PUMP	54. SECONDARY DIAPHRAGM ASSY.
11. BOOT-PUMP	55. GASKET-SEC. DIAPHRAGM ASSY.
12. GASKET-PUMP PLATE	56. SCREWS (3)-COVER
13. PUMP ASSEMBLY	57. COVER-LEVEL GAUGE
14. SPRING-PUMP RETURN	58. GAUGE-LEVEL
15. BALL-PUMP INTAKE CHECK	59. SEAL-LEVEL GAUGE
16. SCREW & LOCKWASHER (2)-BOWL VENT SOLENOID	60. COLLAR-FLOAT
17. BOWL VENT SOLENOID ASSY.	61. FLOAT & LEVER ASSY.
18. O-RING (OUTER)-BOWL VENT SOLENOID	62. NEEDLE & SEAT ASSY.
19. O-RING (INNER)-BOWL VENT SOLENOID	63. GASKET (SERVICE)-NEEDLE SEAT
20. SOLENOID ASSY.-ANTI-DIESELING	64. SCREW & LOCKWASHER (LONG)-THROTTLE BODY
21. GASKET-SOLENOID	65. SCREW & LOCKWASHER (HOLLOW)-THROTTLE BODY
22. POP RIVET (2)-CHOKE COVER RETAINER	66. SCREW & LOCKWASHER (2)-THROTTLE BODY
23. SCREW & LOCKWASHER-RETAINER	67. THROTTLE BODY ASSEMBLY
24. RETAINER-CHOKE COVER	68. NEEDLE-IDLE ADJUSTING
25. CHOKE COVER ASSY.-ELECTRIC	69. SPRING-IDLE ADJ. NEEDLE
26. SPRING-SEC. THROTTLE RETURN	70. WASHER-IDLE NEEDLE SEAL
27. SCREW (2)-CHOKE VALVE	71. SEAL-IDLE ADJ. NEEDLE
28. VALVE-CHOKE	72. GASKET-THROTTLE BODY
29. SCREW & LOCKWASHER-FAST IDLE LEVER	73. PLUG-PRI. SLOW JET
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31. SCREW & LOCKWASHER (2)-CHOKE HOUSING	75. JET-PRI. SLOW
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33. CHOKE PULLOFF & HOSE ASSY.	77. GASKET-PLUG
34. BRACKET-CHOKE & SEC. SPRING	78. SPRING-BALL WEIGHT
35. SCREW & LOCKWASHER-BRACKET	79. WEIGHT-BALL
36. BRACKET-FUEL NIPPLE	80. BALL-PUMP DISC.
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38. LOCK-NIPPLE BOLT	82. JET-SEC. MAIN AIR BLEED
39. SCREW & LOCKWASHER (3)-AIR HORN	83. PLUG-SEC. SLOW JET
40. AIR HORN ASSY. WITH DUTY SOLENOID	84. SPRING-SEC. SLOW JET
41. SCREW & LOCKWASHER (2)-DUTY SOLENOID	85. JET-SEC. SLOW
42. DUTY SOLENOID ASSEMBLY	86. JET-SEC. SLOW AIR BLEED
43. O-RING (UPPER)-DUTY SOLENOID	87. LOCK TAB-PLUGS
44. O-RING (LOWER)-DUTY SOLENOID	88. PLUG-PRI. MAIN JET
	89. GASKET-PLUG
	90. JET-PRI. MAIN
	91. PLUG-SEC. MAIN JET
	92. GASKET-PLUG
	93. JET-SEC. MAIN
	94. BOWL ASSEMBLY

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. AIR HORN ASSEMBLY WITH DUTY SOLENOID USE A SPRAY CARBURETOR CLEANER TO CLEAN PASSAGES IN AIR HORN. DO NOT SOAK THIS ASSEMBLY. SOAK OTHER METAL PARTS IN CARBURETOR CLEANING SOLVENT LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL CARBON DEPOSITS. WASH OFF IN SUITABLE SOLVENT. BLOW OUT PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY FOR CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK RUBBER PARTS, SOLENOIDS, DIAPHRAGM UNITS, FLOAT, OR ELECTRIC CHOKE COVER ASSEMBLY IN ANY TYPE OF CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND ADJUSTMENTS.

SPECIAL INSTRUCTIONS

APPLY LIGHT COATING OF OIL ON O-RINGS BEFORE INSTALLING.

IDLE ADJUSTING NEEDLE (68)-TURN NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT 1 1/2 TURNS.

NEEDLE & SEAT (62)-INSTALL GASKET (63) ON SERVICE NEEDLE SEAT BEFORE INSTALLING.

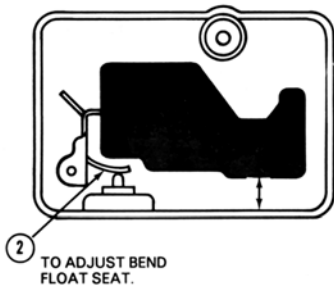
LEVER GAUGE COVER SCREWS (56)-TIGHTEN SCREWS DOWN EVENLY. (DO NOT OVER TIGHTEN.)

PUMP RETURN SPRING (14)-INSTALL WITH CROSS WIRE TO THE BOTTOM OF PUMP CYLINDER IN SLOT.

ADJUSTMENTS

- 1 FLOAT BOWL INVERTED. FLOAT RESTING ON NEEDLE OF ITS OWN WEIGHT. SET FLOAT PARALLEL WITH TOP OF FLOAT BOWL.

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.



DCH-340
DRY FLOAT LEVEL ADJUSTMENT

FIG. 1.

- 1 FLOAT BOWL INVERTED RAISE FLOAT UNTIL FLOAT STOPPER CONTACTS CARBURETOR BODY.

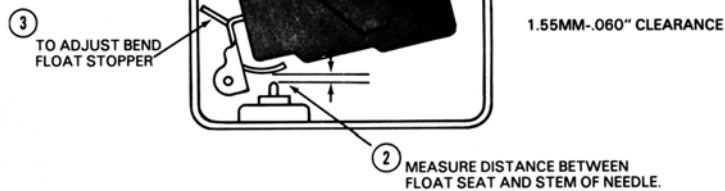
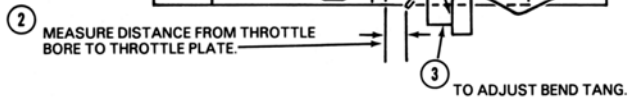


FIG. 2.

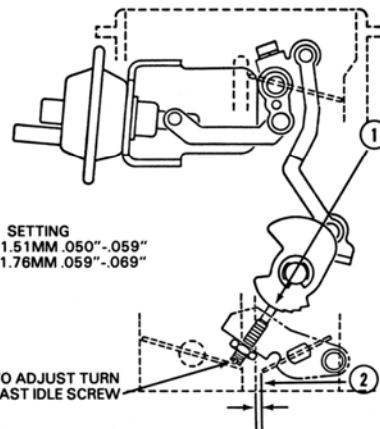
SETTING
6.1-7.6MM
.240"-.300"

- 1 OPEN PRIMARY THROTTLE LEVER UNTIL KICK LEVER JUST MAKES CONTACT WITH SECONDARY RETURN LEVER.



SECONDARY THROTTLE START TO OPEN ADJUSTMENT

FIG. 3.



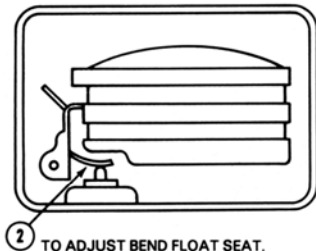
FAST IDLE ADJUSTMENT (BENCH)

FIG. 4.

NOTE: REMOVE NEEDLE PULLCLIP WHEN MAKING ADJUSTMENTS.

- 1 FLOAT BOWL INVERTED. LOWER FLOAT UNTIL IT MAKES CONTACT WITH NEEDLE PIN. (DO NOT COMPRESS NEEDLE SPRING). SET FLOAT PARALLEL WITH TOP OF FLOAT BOWL.

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.



DFP-340
DRY FLOAT LEVEL ADJUSTMENT

FIG. 5.

- 1 FLOAT BOWL INVERTED RAISE FLOAT UNTIL FLOAT STOPPER CONTACTS CARBURETOR BODY. (PULLCLIP REMOVED).

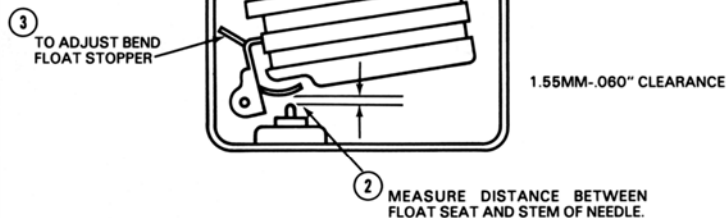
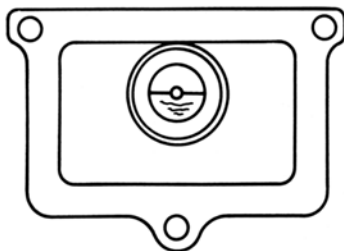


FIG. 6.

FUEL LEVEL IS NORMAL IF IT IS WITHIN THE MARK ON THE WINDOW GLASS. IF LEVEL IS OUTSIDE THE MARK MAKE NECESSARY ADJUSTMENT BY BENDING THE FLOAT SEAT



WET LEVEL CHECK

FIG. 7.