



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

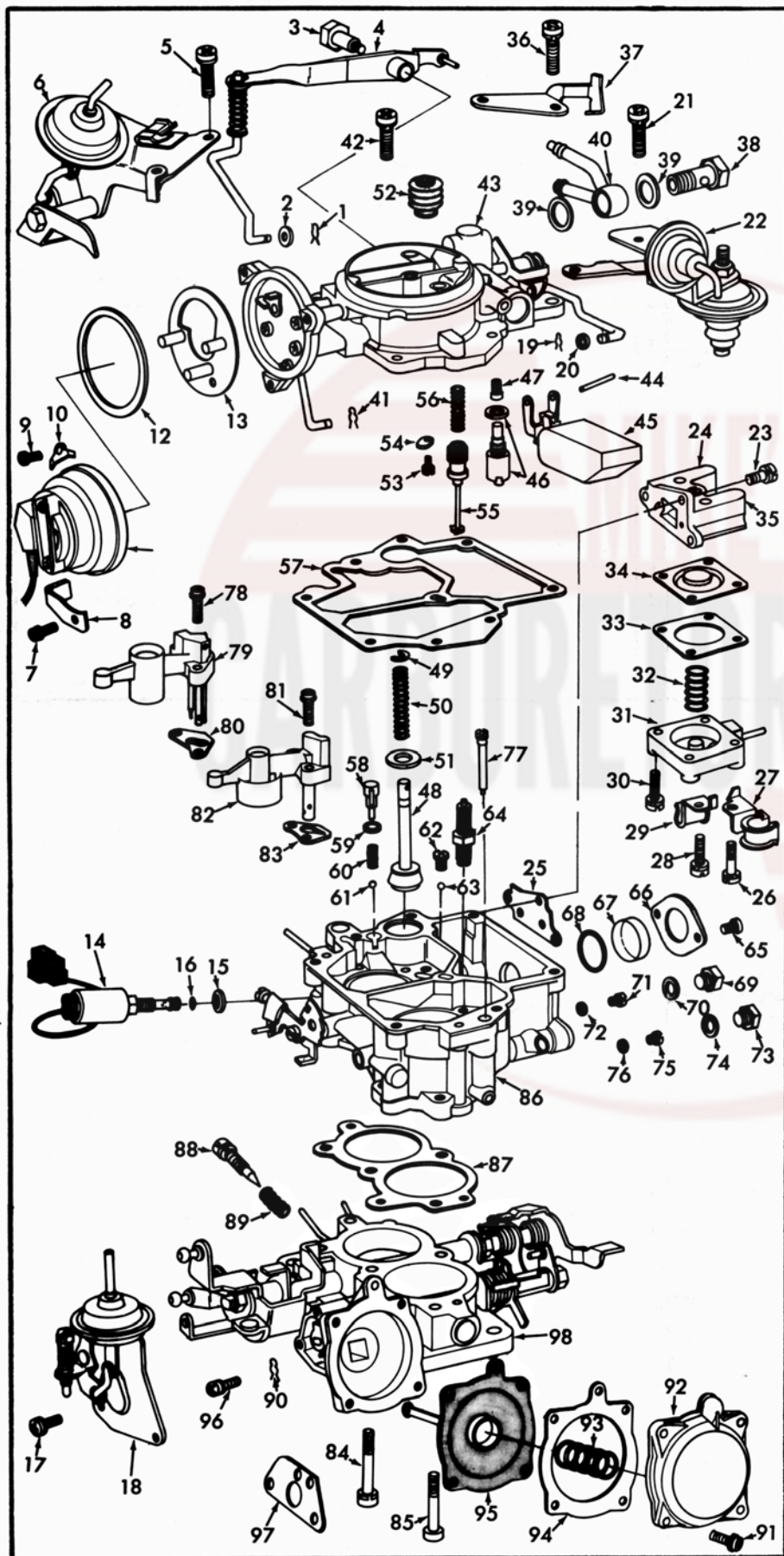
AISAN CARBURETOR

(4M ENGINE)

50-521

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: TO REMOVE SECONDARY
DIAPHRAGM HOUSING GASKET (97), WITHOUT REMOVING THROTTLE
SHAFT ASSY. REMOVE SCREWS (96), SLIT GASKET AT BOTTOM
THRU TO THROTTLE SHAFT HOLE AND PULL OUT. SLIT NEW GASKET
AT BOTTOM TO REINSTALL.

NOMENCLATURE

REF. NO.	REF. NO.
1. RETAINER- PUMP ROD	47. SCREEN- FUEL FILTER
2. WASHER- PUMP ROD	48. PUMP ASSY.
3. SCREW- PUMP LEVER	49. E CLIP- PUMP STEM
4. LEVER & CONNECTING ROD ASSY.- PUMP	50. SPRING- PUMP RETURN
5. SCREW & LOCKWASHER (2)- FAST IDLE VACUUM BRAKE DIAPHRAGM	51. WASHER- PUMP RETURN SPRING
6. DIAPHRAGM ASSY.- FAST IDLE VACUUM BREAK	52. BOOT- PUMP
7. SCREW & LOCKWASHER- CAM STOP	53. SCREW & LOCKWASHER- PISTON STOP
8. STOP- FAST IDLE CAM	54. STOP- PISTON
9. SCREW & LOCKWASHER (2)- CHOKE RETAINER	55. PISTON- POWER
10. RETAINER(2)- CHOKE COVER	56. SPRING- POWER PISTON
11. CHOKE COVER ASSY.	57. GASKET- BOWL COVER
12. GASKET- CHOKE COVER	58. JET- PUMP
13. PLATE- CHOKE BAFFLE	59. O-RING- PUMP JET
14. SOLENOID- IDLE CUT OFF	60. SPRING- PUMP DISC. BALL
15. GASKET- SOLENOID	61. BALL- PUMP DISC (LARGE)
16. O-RING- SOLENOID	62. PLUG- BALL CHECK.
17. SCREW & LOCKWASHER (3)- THROTTLE POSITIONER	63. BALL- PUMP INTAKE CHECK (SMALL)
18. THROTTLE POSITIONER ASSY.	64. POWER VALVE ASSY.
19. RETAINER- CHOKE PULL OFF LINK	65. SCREW (2)- SIGHT GLASS RETAINER
20. WASHER- CHOKE PULL OFF LINK	66. RETAINER- SIGHT GLASS
21. SCREW & WASHERS (2)- CHOKE PULL OFF ASSY.	67. SIGHT GLASS
22. CHOKE PULL OFF & DASHPOT ASSY.	68. O-RING- SIGHT GLASS SEAL
23. SCREW & LOCKWASHER (3)- AUX PUMP ASSY.	69. PLUG- PRI. MAIN JET
24. AUX. PUMP ASSY.	70. GASKET- PLUG
25. GASKET- AUX. PUMP ASSY.	71. JET- PRI. MAIN (BRASS)
26. SCREW & LOCKWASHER- CLAMP	72. GASKET- PRI. MAIN JET
27. CLAMP- TUBE	73. PLUG- SEC. MAIN JET
28. SCREW & LOCKWASHER- CLAMP	74. GASKET- PLUG
29. CLAMP- TUBE.	75. JET- SEC. MAIN (CROME)
30. SCREW & LOCKWASHER (2)- COVER	76. GASKET- SEC. MAIN JET
31. COVER- AUX. PUMP DIAPHRAGM	77. JET- IDLE
32. SPRING- AUX. DIAPHRAGM	78. SCREW & LOCKWASHER (2)- PRI. VENTURI
33. GASKET- AUX. DIAPHRAGM	79. PRIMARY VENTURI ASSY
34. DIAPHRAGM ASSY.- AUX. PUMP	80. GASKET- PRI. VENTURI
35. HOUSING- AUX. PUMP	81. SCREW & LOCKWASHER (2)- SEC. VENTURI
36. SCREW & LOCKWASHER (2)- FUEL INLET FITTING LOCK	82. SECONDARY VENTURI ASSY
37. LOCK- FUEL INLET FITTING	83. GASKET- SEC. VENTURI
38. BOLT- FUEL INLET FITTING	84. SCREW & LOCKWASHER (3)- THROTTLE BODY
39. GASKET (2)- FUEL INLET FITTING	85. SCREW & LOCKWASHER- THROTTLE BODY (HOLLOW)
40. FITTING- FUEL INLET & BY PASS	86. FLOAT BOWL ASSY
41. RETAINER- FAST IDLE ROD	87. GASKET- THROTTLE BODY
42. SCREW & LOCKWASHER- BOWL COVER.	88. NEEDLE- IDLE ADJUSTING
43. BOWL COVER ASSY.	89. SPRING- IDLE ADJ. NEEDLE
44. PIN- FLOAT	90. RETAINER- SEC. DIAPHRAGM ROD
45. FLOAT ASSY.	91. SCREW & LOCKWASHER (4)- COVER
46. NEEDLE, SEAT & GASKET ASSY.	92. COVER- SEC. VACUUM DIAPHRAGM
	93. SPRING- SEC. DIAPHRAGM
	94. GASKET- SEC. DIAPHRAGM
	95. SECONDARY DIAPHRAGM ASSY.
	96. SCREW & LOCKWASHER (3)- SEC. DIAPHRAGM HOUSING
	97. GASKET- SEC. DIAPHRAGM HOUSING
	98. THROTTLE BODY ASSY.

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 CASTINGS
WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH
CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK ANY OF THE
FOLLOWING PARTS IN CLEANING SOLVENTS. PARTS MADE OF RUBBER,
DIAPHRAGM ASSOYS (6),(18),(22),(95), FLOAT (45),CHOKE COVER
(11), SOLENOID (14).

REASSEMBLY

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

ADJUSTMENTS

SPECIAL INSTRUCTIONS

SECONDARY HOUSING GASKET (88)-SLIT BOTTOM OF GASKET THRU TO THROTTLE SHAFT HOLE AND CAREFULLY SLIP IN TO PLACE.

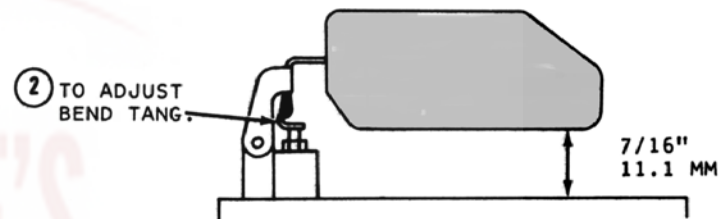
IDLE ADJUSTING NEEDLE (79)-TURN NEEDLE IN UNTIL LIGHTLY SEATED, THEN BACK OUT 2 1/2 TURNS.

SIGHT GLASS (67)-INSTALL WITH DOT TO THE INSIDE OF FUEL BOWL.

PUMP PLUNGER (48)-REMOVE PAPER SLEEVE FROM LEATHER CUP IF USED, FLEX LEATHER OUTWARD SLIGHTLY. SOAK CUP IN LIGHT OIL FOR A FEW MINUTES PRIOR TO PLACING IN CARBURETOR.

CHOKE COIL COVER (11)-WHEN INSTALLING BE SURE HOOK ON COIL SPRING IS AGAINST ARM OF CHOKE SHAFT. ROTATE CHOKE COVER AGAINST SPRING TENSION. ALIGN MARK ON COVER WITH INDEX MARK ON HOUSING.

- ① BOWL COVER INVERTED, FLOAT RESTING ON SPRING LOADED NEEDLE OF ITS OWN WEIGHT. MEASURE DISTANCE BETWEEN FLOAT AT TOE END AND CASTING SURFACE.

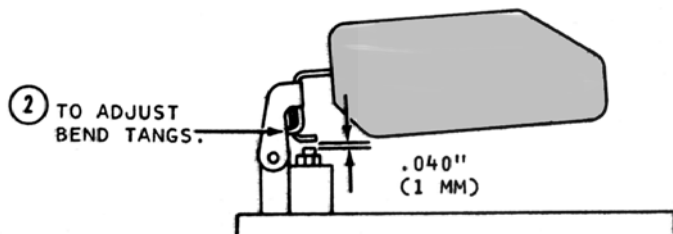


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT
SPRING LOADED NEEDLE

FIG. 1.

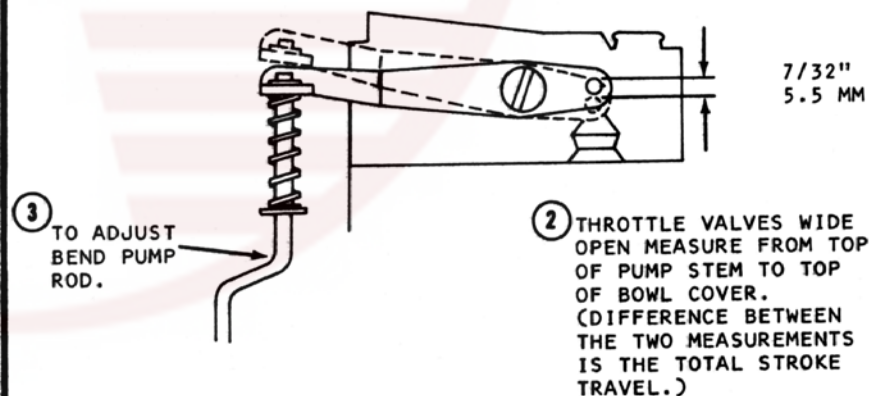
- ① BOWL COVER INVERTED. RAISE FLOAT BY HAND UNTIL IT CONTACTS FLOAT HANGER. MEASURE DISTANCE BETWEEN NEEDLE VALVE PUSH PIN AND FLOAT TAB.



FLOAT DROP ADJUSTMENT
SPRING LOADED NEEDLE

FIG. 2.

- ① THROTTLE VALVES CLOSED MEASURE FROM TOP OF PUMP STEM TO TOP OF BOWL COVER.



PUMP ADJUSTMENT.

FIG. 3.