



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

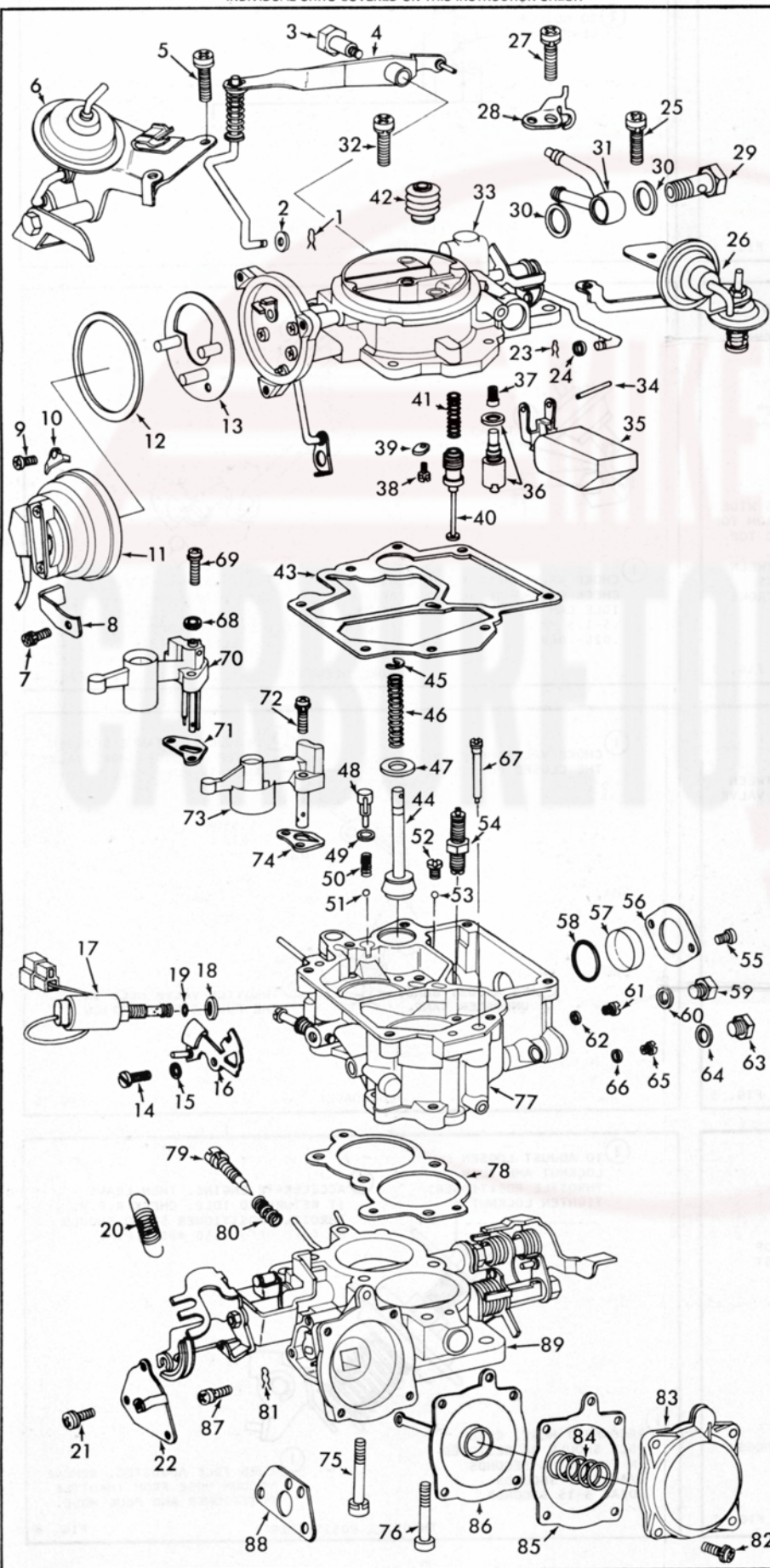
AISAN CARBURETOR

(4M ENGINE 1978)

IS-50-554

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 (88), WITHOUT REMOVING THROTTLE SHAFT ASSY., REMOVE SCREWS (87), SLIT GASKET AT BOTTOM THROUGH TO THROTTLE SHAFT HOLE AND PULL OUT. SLIT NEW GASKET AT BOTTOM TO REINSTALL.

NOMENCLATURE

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

REASSEMBLY

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

SPECIAL INSTRUCTIONS

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

IDLE ADJUSTING NEEDLE (79) - TURN NEEDLE IN UNTIL LIGHTLY SEATED, THEN BACK OUT 3 1/2 TURNS.

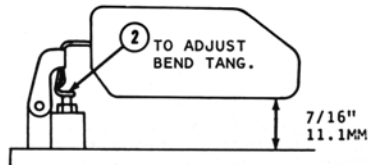
SIGHT GLASS (57) - INSTALL WITH DOT TO THE INSIDE OF FUEL BOWL.

PUMP PLUNGER (44) - 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.

ADJUSTMENTS

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

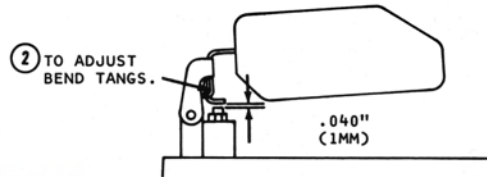


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT
SPRING LOADED NEEDLE

FIG. 1

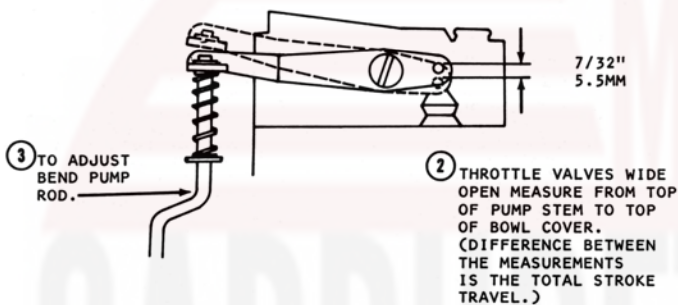
- 1 BOWL COVER INVERTED. RAISE FLOAT BY HAND UNTIL IT CONTACTS FLOAT HANGER. MEASURE DISTANCE BETWEEN NEEDLE VALVE PUSH PIN AND FLOAT TAB.



FLOAT DROP ADJUSTMENT
SPRING LOADED NEEDLE

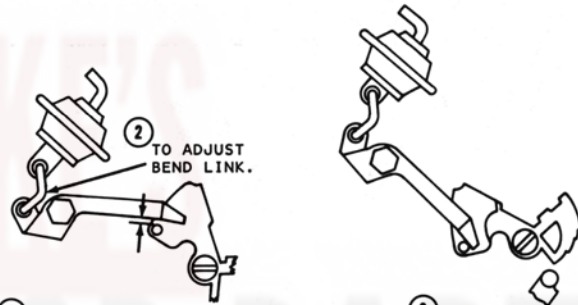
FIG. 2

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



PUMP ADJUSTMENT

FIG. 3



- 1 CHOKE VALVE HELD FULLY CLOSED. CHECK CLEARANCE BETWEEN FAST IDLE CAM PIN AND BREAKER LEVER. .5-1.5 MM .020-.060

- 3 APPLY VACUUM TO FULLY SEAT DIAPHRAGM. THROTTLE STOP SHOULD CLEAR FAST IDLE CAM. (OPEN THROTTLE TO RELEASE CAM).

CHOKE OPENER

FIG. 4

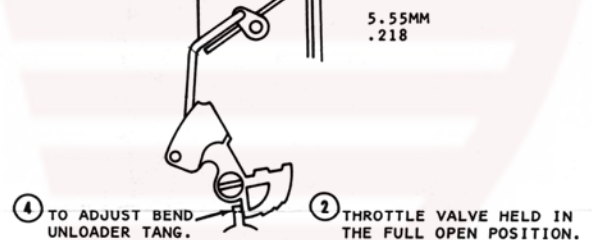
- 1 CHOKE VALVE HELD CLOSED. APPLY VACUUM TO FULLY SEAT DIAPHRAGM.



(CHOKE BREAKER)
VACUUM BRAKE ADJUSTMENT

FIG. 5

- 1 CHOKE VALVE HELD IN THE CLOSED POSITION.
- 3 MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

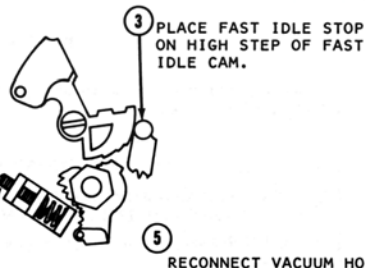


UNLOADER

FIG. 6

- 1 CURB IDLE ADJUSTED.

- 2 DISCONNECT VACUUM HOSE FROM CHOKE OPENER THEN PLUG HOSE.



ADJUST FAST IDLE SCREW TO CORRECT R.P.M. 2500 R.P.M. ±200 R.P.M.

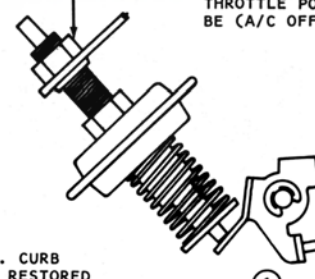
- 3 PLACE FAST IDLE STOP ON HIGH STEP OF FAST IDLE CAM.
- 5 RECONNECT VACUUM HOSE.

ON CAR
FAST IDLE ADJUSTMENT

FIG. 7

- 3 TO ADJUST LOOSEN LOCKNUT AND TURN THROTTLE POSITIONER. TIGHTEN LOCKNUT.

- 2 ACCELERATE ENGINE, THEN LEAVE IT RETURN TO IDLE. CHECK R.P.M. THROTTLE POSITIONER SPEED SHOULD BE (A/C OFF) 1150 ±50 R.P.M.



- 4 RECONNECT HOSE. CURB IDLE SHOULD BE RESTORED IN FOLLOWING SECONDS W/AC 8-20 SECONDS WO/AC 5-15 SECONDS

- 1 CURB IDLE ADJUSTED. REMOVE VACUUM HOSE FROM THROTTLE POSITIONER AND PLUG HOSE.

THROTTLE POSITAINER

FIG. 8