



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

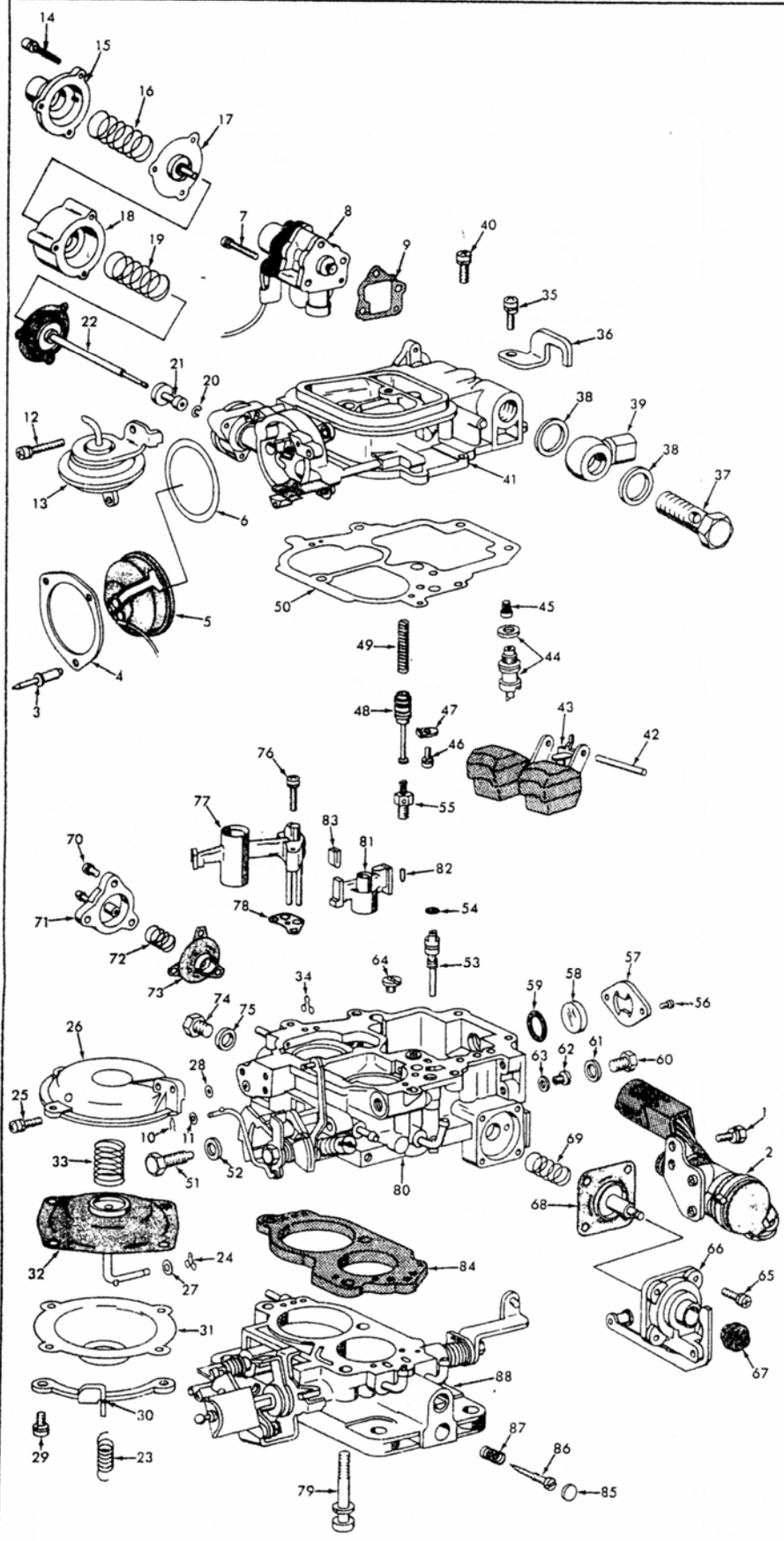
AISAN 2 VENTURI

1987-88 RANGER

50-715-1

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. DRILL OR CUT OFF POP RIVET HEADS (3) TO REMOVE CHOKE COVER. TO REMOVE PLUG (85) COVERING IDLE NEEDLE, CENTER PUNCH CENTER OF PLUG AND CAREFULLY DRILL A HOLE IN PLUG. (NOTE THERE IS ONLY .040" CLEARANCE BETWEEN PLUG AND IDLE NEEDLE.) USE A PULLER OR PRY PLUG FROM HOLE.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER (2) - IDLE SPEED CONTROL	41. BOWL COVER ASSY.
2. IDLE SPEED CONTROL ASSY	42. PIN - FLOAT
3. POP RIVET (3) - CHOKE RETAINER	43. FLOAT & LEVER ASSY.
4. RETAINER - CHOKE COVER	44. NEEDLE & SEAT ASSY.
5. CHOKE COVER ASSY - ELECTRIC	45. SCREEN - FUEL INLET
6. GASKET - CHOKE COVER	46. SCREW & LOCKWASHER - RETAINER
7. SCREW & LOCKWASHER (3) - BOWL VENT ASSY.	47. RETAINER - POWER PISTON
8. BOWL VENT ASSY.	48. PISTON - POWER
9. GASKET - BOWL VENT ASSY.	49. SPRING - POWER PISTON
10. RETAINER - CHOKE OPENER LINK	50. GASKET - BOWL COVER
11. WASHER - CHOKE OPENER LINK	51. PLUG - IDLE PASSAGE (LONG)
12. SCREW & LOCKWASHER - CHOKE OPENER	52. GASKET - PLUG
13. FAST IDLE CAM BREAKER ASSY	53. JET - SLOW
14. SCREW & LOCKWASHER (3) - COVER	54. O RING - SLOW JET
15. COVER - CHOKE PULLDOWN	55. POWER VALVE & JET ASSY
16. SPRING - DIAPHRAGM	56. SCREW (2) - WINDOW RETAINER
17. DIAPHRAGM - SECOND STAGE PULLDOWN	57. RETAINER - WINDOW
18. HOUSING - CHOKE PULLDOWN	58. WINDOW - FUEL LEVEL
19. SPRING - DIAPHRAGM	59. O RING - WINDOW
20. E CLIP - STEM GUIDE	60. PLUG - PRI. MAIN JET
21. GUIDE BUSHING - STEM	61. GASKET - PLUG
22. DIAPHRAGM - FIRST STAGE PULLDOWN	62. JET - PRIMARY MAIN
23. SPRING - SECONDARY LOCKOUT LEVER	63. GASKET - PRI. MAIN JET
24. RETAINER - SEC. DIAPHRAGM LINK	64. JET - SECONDARY MAIN (NO GASKET)
25. SCREW & LOCKWASHER (2) - SEC. DIAPHRAGM ASSY	65. SCREW & LOCKWASHER (4) - PUMP COVER
26. SECONDARY DIAPHRAGM ASSY.	66. COVER & LEVER - PUMP
27. WASHER - SEC. DIAPHRAGM LINK	67. BOOT - PUMP STEM
28. GASKET - SEC. DIAPHRAGM ASSY	68. DIAPHRAGM ASSY - PUMP
29. SCREW & LOCKWASHER (4) - SEC. DIAPHRAGM COVER	69. SPRING - PUMP DIAPHRAGM
30. BRACKET - SEC. SPRING	70. SCREW & LOCKWASHER (3) - COVER
31. COVER - SEC. DIAPHRAGM	71. COVER - AUX. PUMP DIAPHRAGM
32. DIAPHRAGM ASSY - SECONDARY THROTTLE	72. SPRING - AUX. PUMP DIAPHRAGM
33. SPRING - SEC. DIAPHRAGM	73. DIAPHRAGM ASSY - AUX. PUMP
34. RETAINER - FAST IDLE LINK (UPPER)	74. PLUG - PASSAGE
35. SCREW & LOCKWASHER - FUEL UNION BRACKET	75. GASKET - PLUG
36. BRACKET - FUEL UNION	76. SCREW & LOCKWASHER (2) - SECONDARY VENTURI
37. BOLT - FUEL UNION	77. SECONDARY VENTURI ASSY
38. GASKET (2) - FUEL UNION	78. GASKET - SEC. VENTURI
39. FUEL UNION	79. SCREW & LOCKWASHER (3) - THROTTLE BODY
40. SCREW & LOCKWASHER (4) - BOWL COVER	80. BOWL ASSY.
	81. PRIMARY VENTURI ASSY.
	82. O RING - PRI. VENTURI
	83. RETAINER - PRI. VENTURI
	84. GASKET - THROTTLE BODY
	85. PLUG - IDLE NEEDLE
	86. NEEDLE - IDLE ADJUSTING
	87. SPRING - IDLE ADJ. NEEDLE
	88. THROTTLE BODY ASSY.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. USE A CARBURETOR CLEANING SOLVENT. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. MAKE CERTAIN THE THROTTLE BORES ARE 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 RUBBER PARTS, DIAPHRAGMS OR ITEMS SUCH AS (2), (5), (8), (13), (43), (44), (45), IN CLEANING SOLVENTS.

REASSEMBLY

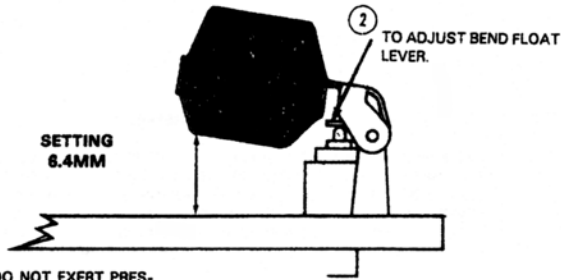
REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND ADJUSTMENTS.

SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE (86) - TURN NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT 2 1/2 TURNS.

ADJUSTMENTS

- ① BOWL COVER INVERTED. (NO GASKET). FLOAT RESTING ON NEEDLE OF ITS OWN WEIGHT. MEASURE DISTANCE BETWEEN FLOAT AT TOE END AND CASTING SURFACE.

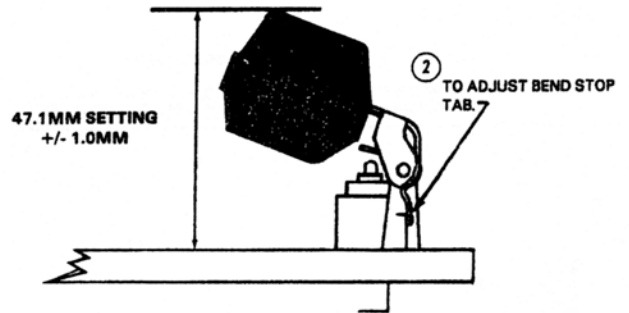


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT

FIG. 1

- ① BOWL COVER INVERTED. RAISE FLOAT BY HAND UNTIL IT CONTACTS FLOAT HANGER. MEASURE DISTANCE FROM BOTTOM OF FLOAT TO CASTING SURFACE.



FLOAT DROP ADJUSTMENT

FIG. 2

TWO STAGE CHOKE PULLDOWN ADJUSTMENT

1. FIRST STAGE

- SET THE CHOKE ON HIGH CAM BY DEPRESSING THE THROTTLE LEVER TO THE 1/2 OPEN POSITION AND THEN PUSHING THE CHOKE PLATE COMPLETELY CLOSED. WHILE HOLDING THE CHOKE PLATE CLOSED, RELEASE THE THROTTLE LEVER AND THEN RELEASE THE CHOKE PLATE.
- ACTIVATE THE FIRST STAGE PULLDOWN BY APPLYING AN EXTERNAL VACUUM SOURCE (16 IN.-HG. MINIMUM) TO THE FIRST STAGE VACUUM CONNECTION.
- CHECK THE CHOKE PLATE ANGLE (38° FOR 1987; 40° FOR 1988), OR CHECK THE CLEARANCE BETWEEN LOWER EDGE OF CHOKE PLATE AND AIRHORN WALL (1.12 IN. FOR 1987; 1.28 IN. FOR 1988) BY USING A DRILL OF THE PROPER DIAMETER.
- IF ADJUSTMENT IS NEEDED, BEND THE FIRST STAGE ADJUSTMENT LEVER TO GET THE CORRECT ANGLE OR CLEARANCE.

2. SECOND STAGE

- ACTIVATE THE SECOND STAGE PULLDOWN BY APPLYING AN EXTERNAL VACUUM SOURCE (16 IN.-HG. MINIMUM) TO THE SECOND STAGE VACUUM CONNECTION HOLD A VACUUM TO FIRST STAGE VACUUM CONNECTION AT THE SAME TIME.
- CHECK THE CHOKE PLATE ANGLE TO BE 62° OR CHECK THE CLEARANCE BETWEEN LOWER EDGE OF CHOKE PLATE AND AIRHORN WALL TO BE .370 IN. BY USING A DRILL OF THE PROPER DIAMETER.
- IF ADJUSTMENT IS NEEDED, TURN THE SECOND STAGE ADJUSTMENT SCREW TO GET A CORRECT ANGLE OR CLEARANCE.

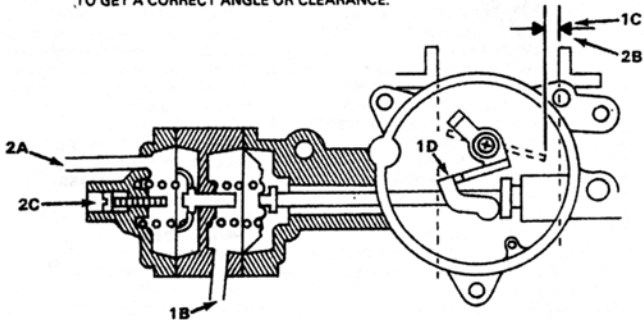


FIG. 3

FAST IDLE CAM INDEX SETTING

- POSITION THE FAST IDLE LEVER ON THE SECOND STEP OF THE FAST IDLE CAM AGAINST THE SHOULDER OF THE HIGH STEP (FIRST STEP).
- CHECK THE CHOKE PLATE ANGLE TO BE 35°, OR CHECK THE CLEARANCE BETWEEN LOWER EDGE OF CHOKE PLATE AND AIRHORN WALL TO BE 0.088 IN. BY USING A DRILL OF THE PROPER DIAMETER.
- IF ADJUSTMENT IS NEEDED, BEND THE FAST IDLE CAM INDEX TANG TO GET THE CORRECT ANGLE OR CLEARANCE.

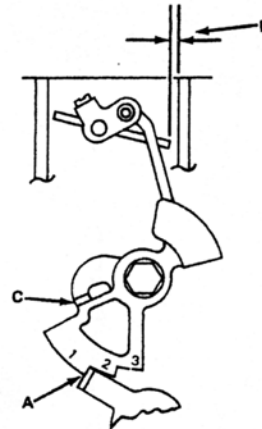


FIG. 4

DE-CHOKE ADJUSTMENT (UNLOADER)

- HOLD THE THROTTLE PLATE FULLY OPEN, AND CLOSE THE CHOKE PLATE AS FAR AS POSSIBLE WITHOUT FORCING IT. CHECK THE CHOKE PLATE ANGLE TO BE 48°, OR CHECK THE CLEARANCE BETWEEN LOWER EDGE OF CHOKE PLATE AND AIRHORN WALL TO BE 0.206 IN. BY USING A DRILL OF THE PROPER DIAMETER.
- IF ADJUSTMENT IS NEEDED BEND THE DECHOKE TANG TO GET A CORRECT ANGLE OR CLEARANCE.

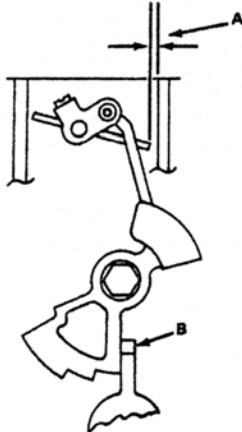


FIG. 5

FAST IDLE CAM BREAKER ADJUSTMENT (F.I.C.B.)

- FULLY RETRACT THE IDLE SPEED CONTROL MOTOR (ELECTRICALLY).
- SET THE THROTTLE ON THE HIGH CAM POSITION.
- APPLY AN EXTERNAL VACUUM SOURCE (16 IN.-HG. MINIMUM) TO F.I.C.B. DIAPHRAGM.
- THE FAST IDLE LEVER SHOULD BE ON THE THIRD STEP OF THE FAST IDLE CAM.
- IF ADJUSTMENT IS NEEDED, BEND F.I.C.B. LINK.

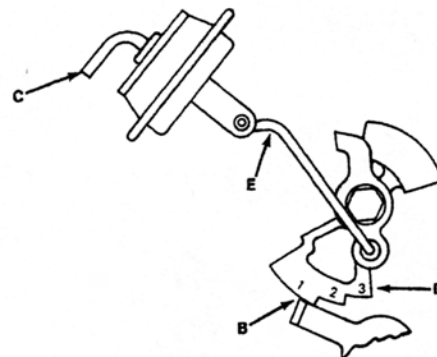


FIG. 6