

# FUEL SYSTEM

## SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF5535

KEIHIN

TRIPLE 1 BARREL CARBURETOR

Carefully read the text in the following pages to become familiar with the contents of this worksheet **before** performing carburetor overhaul.

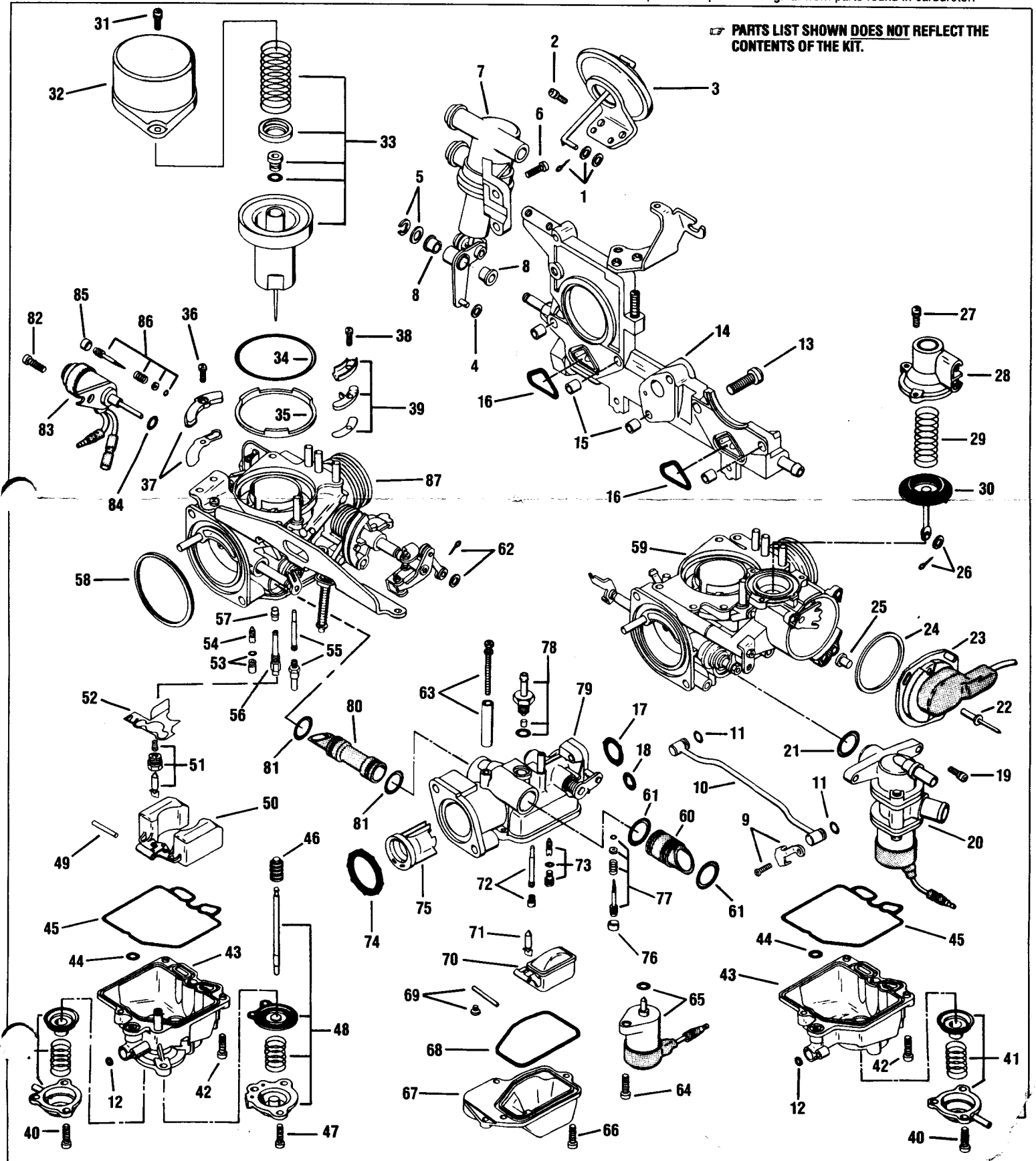
1. The exploded view is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being overhauled.

3. Use the exploded view as a guide. The numerical sequence may generally be followed to disassemble the carburetor far enough to permit cleaning and inspection.

4. Parts list shown **DOES NOT** reflect the contents of the kit.

5. Kit may contain extra parts intended for other carburetors within this group. Substitute identical replacement parts for original worn parts found in carburetor.

PARTS LIST SHOWN DOES NOT REFLECT THE CONTENTS OF THE KIT.

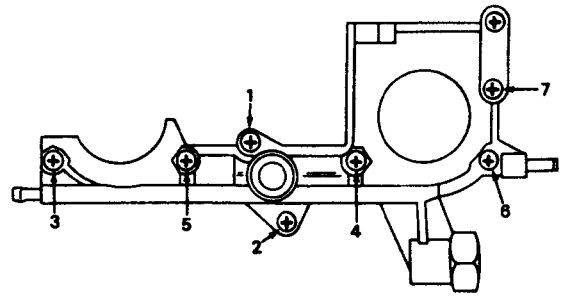


**FIG. 1**

**TIGHTENING SEQUENCE OF SCREWS**

1. INSTALL FRONT BRACKET WITH GUIDE BUSHING AND NEW SEALS.  
DO NOT TIGHTEN SCREWS.  
**CAUTION:** BE SURE TO USE CORRECT LENGTH OF SCREWS IN APPROPRIATE LOCATIONS.
2. CHECK THAT CHOKE AND THROTTLE SHAFTS MOVE FREELY WITHOUT BINDING.
3. TIGHTEN SCREWS IN THE SEQUENCE SHOWN.

**FRONT BRACKET**



**ADJUSTMENT DATA**

**FIG. 2**  
**FLOAT LEVEL ADJUSTMENT**

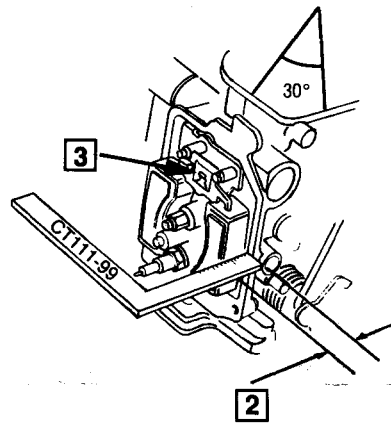
**Right & Left Carburetors:**

1. TILT MAIN BODY ASSEMBLY ABOUT 30° FROM VERTICAL.
2. WITH FLOAT TAB LIGHTLY CONTACTING NEEDLE, MEASURE DISTANCE FROM CASTING SURFACE TO MIDDLE OF FLOAT. **CAUTION:** DO NOT COMPRESS SPRING-LOADED NEEDLE.
3. TO ADJUST, BEND FLOAT TAB AS NECESSARY.

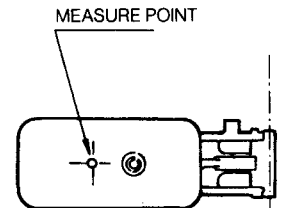
**Center Carburetor:**

4. REPEAT STEPS 1 & 2 ABOVE.
5. CENTER CARB. FLOAT CANNOT BE ADJUSTED. IF FLOAT LEVEL IS INCORRECT, REPLACE FLOAT.

**Right & Left Carburetors**



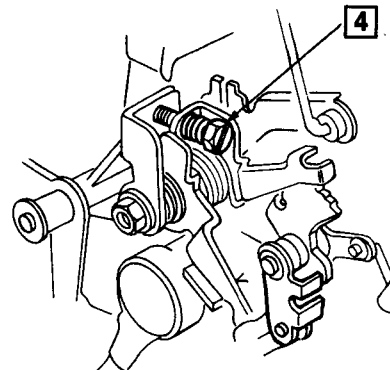
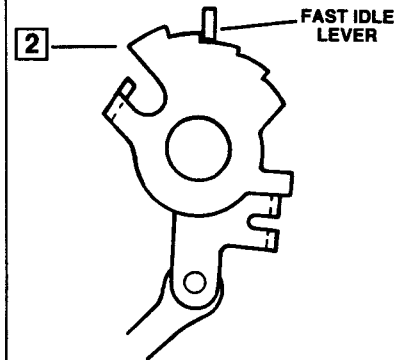
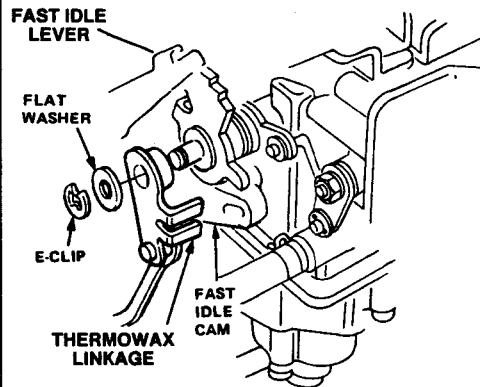
**Center Carburetor**



**FIG. 3**  
**FAST IDLE ADJUSTMENT**

NOTE: THIS ADJUSTMENT IS DONE AFTER ENGINE WAS WARMED UP TO NORMAL OPERATING TEMPERATURE AND THEN STOPPED.

1. CLEAR THERMOWAX LINKAGE FROM FAST IDLE CAM AS SHOWN. BE CAREFUL NOT TO BEND LINKAGE.
2. HOLD THROTTLE VALVE OPEN AND TURN FAST IDLE CAM COUNTER-CLOCKWISE TO ALIGN FAST IDLE LEVER AS SHOWN.
3. CONNECT TACHOMETER AND START ENGINE WITHOUT OPENING THE THROTTLE VALVE. IDLE SPEED SHOULD BE AS SPECIFIED. SEE CHART.
4. ADJUST BY TURNING FAST IDLE ADJUSTING SCREW. AFTER COMPLETION, STOP ENGINE AND RECONNECT THERMOWAX LINKAGE.  
**NOTE:** TO MAKE SURE THAT LINKAGES OPERATE CORRECTLY. START ENGINE AND CHECK THAT IDLE SPEED DECREASES AS ENGINE TEMPERATURE INCREASES.



## ADJUSTMENT DATA (Cont'd)

**FIG. 4**  
**CHOKE LINKAGE ADJUSTMENT**

NOTE: REFER TO REMOVAL NOTE 5 FOR CHOKE COVER REMOVAL.

**STAGE 1:**  
LEAVE UPPER PORT OF CHOKE OPENER VALVE OPEN, CONNECT AN OUTSIDE VACUUM SOURCE TO LOWER PORT AND MAINTAIN 8 IN HG. (200MM HG.). IF VACUUM DROPS, REAPPLY SLOWLY AND MAINTAIN THE HIGHEST LEVEL WITHOUT LOSING VACUUM.

2. TURN CHOKE DRIVE LEVER COUNTER-CLOCKWISE UNTIL IT TOUCHES CHOKE OPENER LEVER.

3. MEASURE CLEARANCE WITH GAUGE OR DRILL BETWEEN TOP OF CHOKE VALVE AND CASTING. SEE SPEC. CHART. TO ADJUST, BEND TAB 'A'.

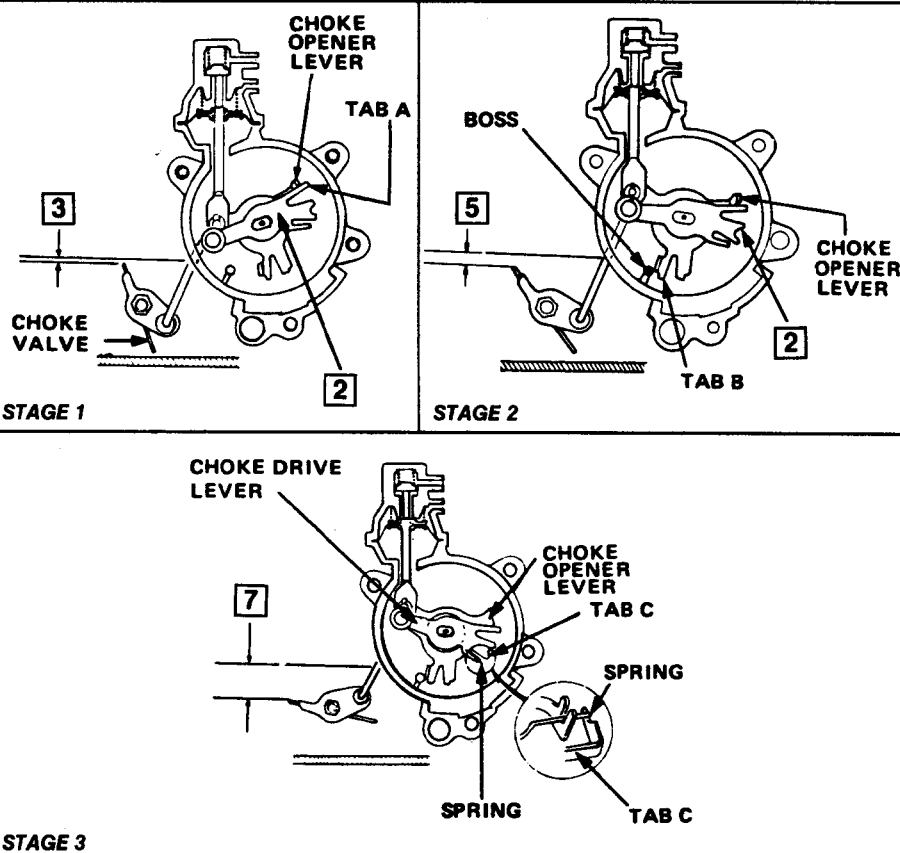
**STAGE 2:**  
4. PLUG UPPER PORT OF OPENER VALVE. APPLY AND MAINTAIN 6-7 HG. (150-180MM HG.).

5. REPEAT STEPS 2 AND 3. TO ADJUST, BEND TAB 'B'.

**STAGE 3:**  
6. WHILE MAINTAINING SAME CONDITION AS IN STAGE 2, RELEASE CHOKE DRIVE LEVER AND TURN UNTIL TAB 'C' TOUCHES THE SPRING.

7. REPEAT STEP 3. TO ADJUST, BEND TAB 'C'.

8. REFER TO INSTALLATION NOTE 5 FOR CHOKE COVER INSTALLATION.



**FIG. 5**  
**THERMOWAX VALVE ADJUSTMENT**

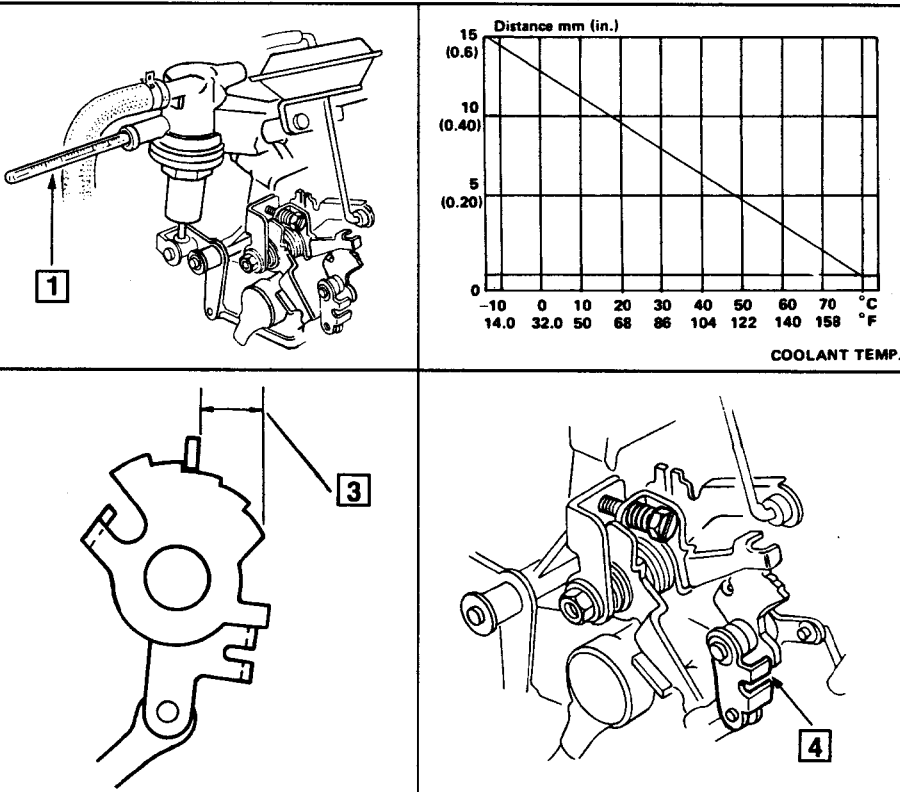
1. INSERT A THERMOMETER TO LOWER PORT OF THERMOWAX VALVE.

2. RECORD TEMPERATURE AND REFER TO CHART. DRAW A VERTICAL LINE FROM TEMPERATURE POINT TO DIAGONAL LINE. FROM THE POINT OF INTERSECTION DRAW A HORIZONTAL LINE TO FIND DISTANCE.

3. MEASURE DISTANCE AS SHOWN FROM END OF FAST IDLE CAM TO END OF FAST IDLE LEVER.

4. TO ADJUST, OPEN OR CLOSE THE GAP.

**NOTE:** REINSTALL HOSE ONTO THERMOWAX VALVE AND ADD COOLANT IF NECESSARY.



## PARTS LIST

- |  |  |   |   |
|--|--|---|---|
| 1. Cotter pin & washers, throttle opener       | 23. Thermostatic coil & cover assembly | 46. Boot, pump stem   | 67. Fuel bowl assembly (center carb.)         |
| 2. Screw, throttle opener (2)                  | 24. Gasket, choke cover                | 47. Screw, cover (3)  | 68. Seal, fuel bowl                           |
| 3. Throttle opener assembly                    | 25. Plastic bushing, choke coil lever  | 48. Pump diaphragm assembly                                 | 69. Screw & pin, float hinge                  |
| 4. Washer, thermowax linkage                   | 26. Pin & washer, diaphragm stem       | 49. Pin, float hinge *                                      | 70. Float assembly (center carb.)             |
| 5. 'E' clip & washer, thermowax valve          | 27. Screw, cover (3)                   | 50. Dual float assembly *                                   | 71. Needle valve, fuel inlet                  |
| 6. Screw, thermowax valve<br>(1 short, 1 long) | 28. Cover, choke opener                | 51. Needle, seat & filter assy.                             | 72. Jet & nozzle, main (center carb.)         |
| 7. Thermowax valve & lever assembly            | 29. Spring, diaphragm return           | 52. Baffle *  | 73. Slow jet assembly (center carb.)          |
| 8. Bushing, thermowax valve (2)                | 30. Diaphragm, choke opener            | 53. Jet & o-ring, primary main *                            | 74. Seal, air cleaner                         |
| 9. Screw & retainer, crossover pipe (2)        | 31. Screw, vacuum chamber (2)*         | 54. Jet, primary slow *                                     | 75. Venturi, center carb.                     |
| 10. Crossover pipe assembly                    | 32. Vacuum chamber assembly *          | 55. Power valve & tube assembly *                           | 76. Plug, idle adjusting screw                |
| 11. Seal, crossover pipe (2)                   | 33. Vacuum piston assembly *           | 56. Jet & holder, secondary main *                          | 77. Idle adjusting screw assy. (center carb.) |
| 12. O-ring, crossover pipe (2)                 | 34. Seal, vacuum chamber *             | 57. Jet, needle *   | 78. Fitting & filter, fuel inlet              |
| 13. Seal, front bracket (4 short, 1 long)      | 35. Spacer ring *                      | 58. Seal, air cleaner *                                     | 79. Main body assembly, center carb.          |
| 14. Front bracket assembly                     | 36. Screw, cover *                     | 59. Main body assy., right carburetor                       | 80. Pipe, fuel vapor                          |
| 15. Guide bushing (6)                          | 37. Jet cover & gasket *               | 60. Pipe, fuel vapor  | 81. O-rings, fuel vapor pipe                  |
| 16. Seal, front bracket (2)                    | 38. Screw, cover *                     | 61. O-rings, fuel vapor pipe                                | 82. Screw, solenoid assembly                  |
| 17. Seal, center carb. (mounting)              | 39. Jet, cover & gasket *              | 62. Pin & washer, throttle link                             | 83. Solenoid assy., idle shut off (2 wires)   |
| 18. Seal, center carb. (water bypass)          | 40. Screw, cover (3) *                 | 63. Screw & spacer, rear bracket<br>(center carburetor)     | 84. O-ring, solenoid                          |
| 19. Screw, air vent solenoid (2)               | 41. Power valve assembly & cover *     | 64. Screw, solenoid assembly                                | 85. Plug, idle adjust. screw *                |
| 20. Air vent solenoid assembly                 | 42. Screw, fuel bowl (3) *             | 65. Solenoid assembly, idle shut off<br>(center carburetor) | 86. Idle adjusting screw assembly *           |
| 21. O-ring, air vent solenoid                  | 43. Fuel bowl assembly                 | 66. Screw, fuel bowl (2)                                    | 87. Main body assembly, left carb.            |
| 22. Pop rivet, choke cover (3)                 | 44. O-ring, pump passage *             |   |   |
|  | 45. Seal, fuel bowl *                  |   |   |

\* Part available in both left & right carburetors.

**CAUTION: DO NOT mix parts.**

## REMOVAL & INSTALLATION NOTES

- Cover opening on intake manifold after carburetor is removed.
- IMPORTANT:** The center carburetor is synchronized to the main carburetors at the factory, and cannot be re-synchronized if both front and rear brackets have been removed at the same time. It is recommended not to remove the rear bracket at all. However, if necessary, disassemble the right carburetor first and leave the rear bracket attached to the left carburetor.
- If right carburetor is removed, note how right unit lever slips out of connecting throttle lever. Disconnect only lower end of center carburetor throttle link.
- Do not disassemble levers. Do not change any adjustment screws on linkage or throttle levers.
- Identify and mark vacuum hoses as they are being removed so they can be reconnected correctly.
- Keep parts of each carburetor in a separate container.  
**DO NOT MIX PARTS.**
- To remove plugs (76, 85), drill a 4mm hole in center of each plug not deeper than 4mm. Use an Easy Out or other tool to pull plugs out.
- Before removing idle adjusting screw (77, 86), turn in until lightly seated counting number of turns. Record for proper installation.
- To remove choke cover assembly (23), drill out 3 pop rivets using a 5/32" bit. When installing choke cover make sure index marks are aligned.
- Install parts and components in reverse order of removal.
- Lightly lubricate "o" rings for easy installation.
- When installing idle adjusting screw (77, 86), turn in until lightly seated, then back out number of turns recorded earlier.
- If needed, use service manual for on vehicle service and adjustments.

## CLEANING

Cleaning must be done with carburetor disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air.

**CAUTION:** When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

## SPECIFICATION CHART †

Year	MODEL	Float Level		Fast Idle	Choke Linkage Adjustment			Thermowax Valve Adjustment	Auto. Choke Adjustment <sup>1</sup>
		Right, Left ±1	Center ±1		Stg. 1 ±.07	Stg. 2 ±.09	Stg. 3 ±.24		

### HONDA, PRELUDE —

1983	1.8L Eng. —A/T	16.0	17.0	2000 <sup>3</sup>	1.43	2.05	9.69	2	T.R.
	—M/T	16.0	17.0	2000 <sup>3</sup>	1.58	2.38	9.16	2	T.R.

#### Footnotes:

- † All dimensions are given in millimeters.  
<sup>1</sup> If cover is removed set to index marks.  
<sup>2</sup> Refer to chart in Fig. 5.  
<sup>3</sup> ±500 RPM.

#### Abbreviations:

- A/T Automatic Transmission  
M/T Manual Transmission  
T.R. Tamper Resistant