

# FUEL SYSTEM

## SERVICE INSTRUCTION WORKSHEET

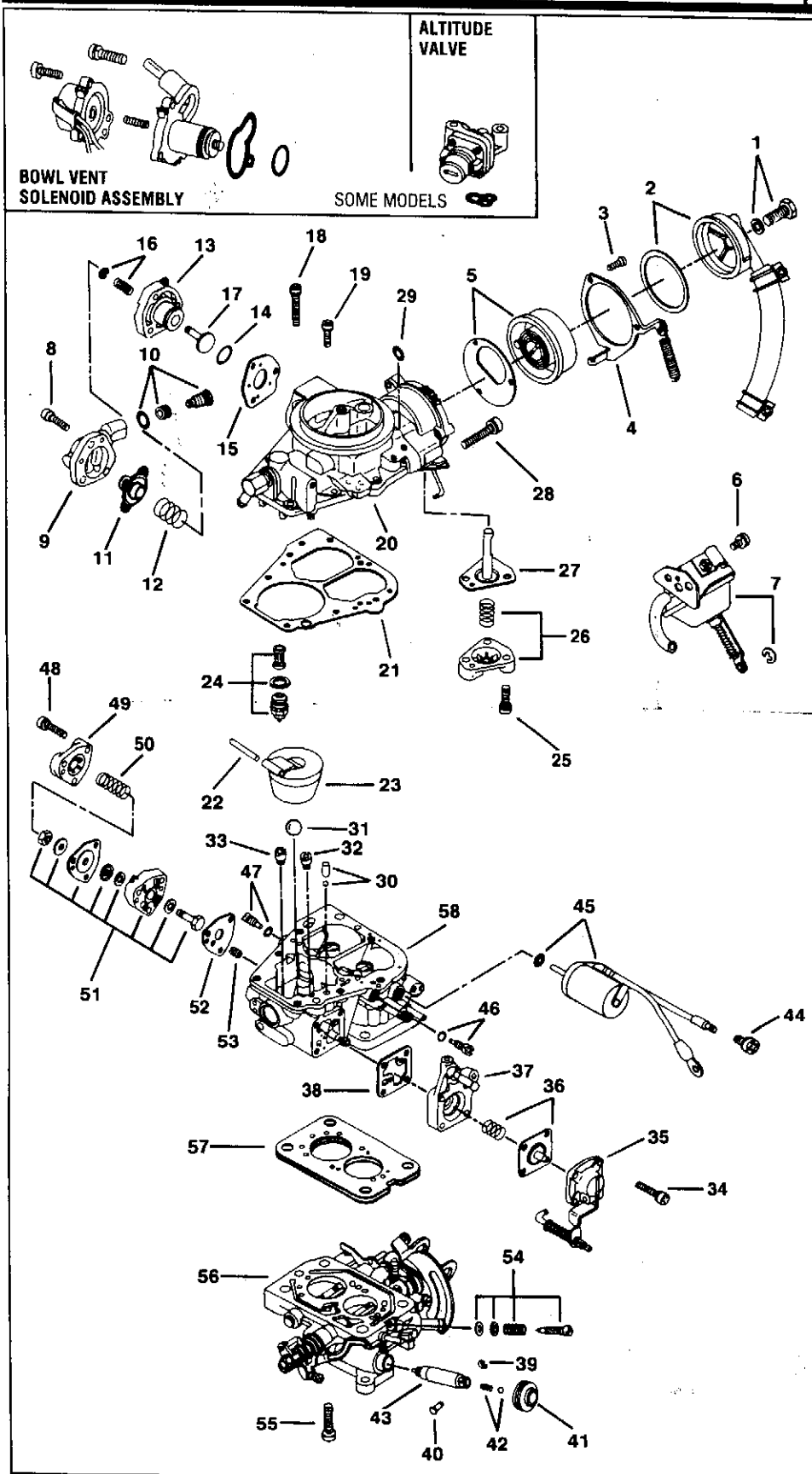
TO REPAIR

GF3623-10

(MIKUNI) SOLEX CARBURETOR

2 BARREL

—Models 28-32 DIDTA, 30-32 DIDTA



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

### 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.

**Important:** Do not soak main body (58), air horn (20) and throttle body (56) for long time because of plastic and rubber components that are not removable.

### PARTS LIST

1. Bolt & washer, water case
2. Water case & gasket
3. Screw, choke cover retainer (3)
4. Retainer & throttle return spring
5. Thermostatic coil, cover & gasket
6. Screw, secondary vacuum unit (2)
7. Secondary vacuum unit assembly
8. Screw, cover alt. valve (3)
9. Cover, alt. valve
10. Jet plug assembly
11. Diaphragm assembly
12. Spring, diaphragm return
13. Housing, alt. valve
14. O-ring, housing
15. Gasket, housing
16. E-clip & spring, alt. valve
17. Alt. valve
18. Screw, air horn (long)
19. Screw, air horn (6 short)
20. Air horn assembly
21. Gasket, air horn
22. Pin, float hinge
23. Float assembly
24. Needle & seat assembly
25. Screw, cover (3)
26. Cover & spring, vac. break diaphragm
27. Diaphragm assembly, vac. break
28. Screw, choke housing (2)
29. O-ring, vac. passage
30. Weight & ball, pump discharge
31. Ball, roll over
32. Jet, primary main
33. Jet, secondary main
34. Screw, cover (4)
35. Cover & link assembly, pump diaphragm
36. Diaphragm & spring, pump
37. Housing, diaphragm
38. Gasket, diaphragm housing
39. E-clip, pin
40. Pin, sub. EGR valve
41. Boot, sub. EGR valve
42. Ball & spring
43. Valve assembly, sub. EGR
44. Screw, solenoid assembly
45. Solenoid assembly & o-ring
46. Jet assembly, primary pilot
47. Jet assembly, secondary pilot
48. Screw, cover (3)
49. Cover, enrichment valve
50. Spring, diaphragm return
51. Enrichment valve assembly
52. Gasket, valve housing
53. Jet, enrichment
54. Idle mixture adjusting screw assembly
55. Screw, throttle body (2)
56. Throttle body assembly
57. Gasket, throttle body
58. Main body assembly

## REMOVAL & INSTALLATION NOTES

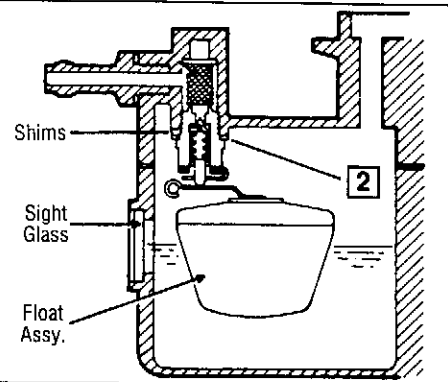
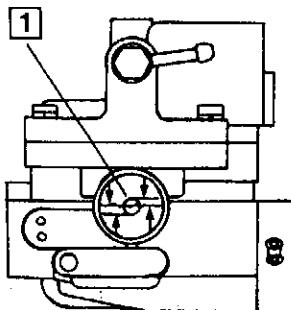
- Cover opening on intake manifold after carburetor is removed.
- Do not remove factory sealed adjusting screws.
- Vacuum passage o-ring (29) can be removed after choke housing screws (28) are removed.
- Mark and record sizes and location of primary and secondary jets for proper installation. Mark diaphragm covers (26, 29) before removing, and index springs (26, 50).
- Disassembly of vacuum diaphragm units (secondary [7], altitude) is not necessary unless replacement is needed.
- Before removing idle adjusting screw (54), turn in until lightly seated counting number of turns. Record for proper installation.
- Install parts and components in reverse order of removal.
- When installing linkages, snap ends into large opening of plastic bushing.
- When installing choke cover (5), be sure loop or hook on stat spring contacts pin of lever on choke shaft. Then, turn cover to align mark with index mark on housing.
- When installing idle mixture adjusting screw (54), turn in until lightly seated, then back out number of turns recorded earlier.
- On applications with roll over ball (31), install steel ball in chamber of float bowl and under brass blade which must be facing downward.

## ADJUSTMENT DATA

**FIG. 1**

### FUEL LEVEL ADJUSTMENT

- With vehicle on flat surface, check that fuel level is in center of dot on sight glass. No adjustment is needed if level is 4mm above or below the center line.
- To adjust, add or remove shims (provided in kit) under needle seat. DO NOT bend float hinge.



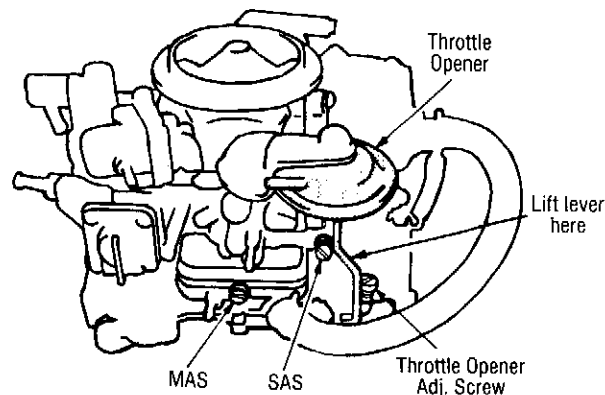
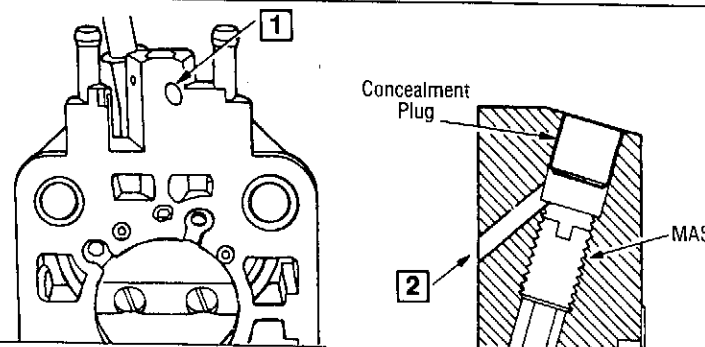
**FIG. 2**

### IDLE SPEED AND MIXTURE ADJUSTMENT

(NOTE: Disregard steps 1 thru 3 if not applicable.)

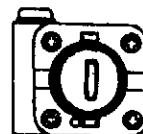
- With carburetor off engine mount throttle body in a vise with idle mixture adjusting screw (MAS) facing up.  
**Caution:** Protect gasket surface from vise jaws.
- Drill a 5/64" pilot hole in the casting at a 45° angle toward concealment plug as shown, then redrill the hole to 1/8".
- Insert a blunt punch into hole and drive plug out. Assemble carburetor and install on engine.
- With vehicle in normal operating temperature, all accessories off, and transmission in neutral, connect Exhaust Gas Analyzer and a tachometer.
- Disconnect air hose between air cleaner and reed valve, and plug reed valve air inlet to prevent secondary air flow from entering the valve. (U.S. applications only).
- Run engine up to 2500 RPM two or three times, then let idle for two minutes.
- Set the idle CO and the engine speed to specified RPM by adjusting the idle speed screw (SAS) and the idle mixture adjusting screw (MAS). See service manual or engine decal for specified RPM.
- Unplug the reed valve and connect air hose to valve. (U.S. applications only).
- Reset engine speed to specified idle RPM by adjusting the idle speed adjusting screw (SAS). (U.S. applications only.)
- For vehicles equipped with throttle opener, lift up opener lever fully and adjust engine speed to throttle opener setting speed by turning throttle opener adjusting screw as shown.
- Idle adjustment for high altitude cars should have manual altitude compensator knob. Set for proper altitude before making idle adjustment.

NOTE: Adjustment should be done at a high altitude location.

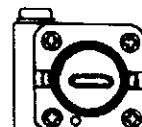


High Alt. Position

Low Alt. Position



Above 4000 ft.



Below 4000 ft.