# FUEL SYSTEM
## SERVICE INSTRUCTION WORKSHEET

## TO REPAIR

NIKKI CARBURETOR

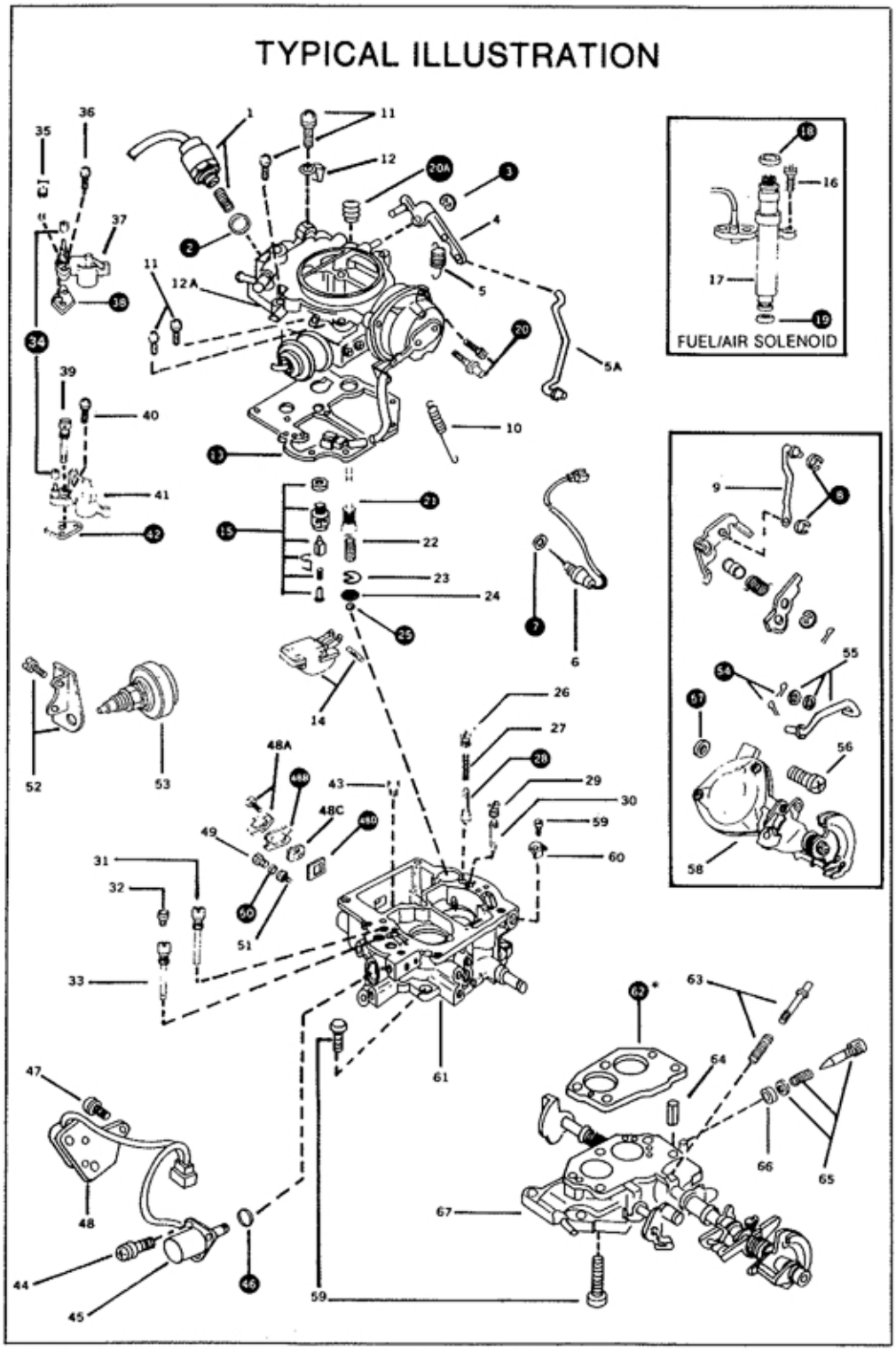
2 BARREL

GF4359-4

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.

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

TYPICAL ILLUSTRATION




NOTE: Circled parts are included in most kits. Extra parts are included for other kits.

* Gasket replacement only.

### PARTS LIST

1. Solenoid & spring assembly, vent valve
2. Gasket, solenoid
3. "E" clip, pump lever
4. Lever, pump
5. Spring, pump lever

5A. Rod, pump lever

6. Solenoid, idle cut-off
7. Gasket, solenoid
8. "E" clip, choke rod (2)
9. Rod, choke
10. Spring, secondary return
11. Screws, air horn (5 short, 2 long)
12. Holder, wire clip

12A. Air horn assembly

13. Gasket, air horn
14. Float & hinge pin assembly
15. Needle (w/lift hook, spring & pin), seat & gasket assembly
16. Screw, air/fuel solenoid (3)
17. Solenoid, air/fuel control
18. "O" ring, upper (large)
19. "O" ring, lower (small)
20. Screw or rivet, choke cover

20A. Boot, pump piston

21. Pump assembly
22. Spring, pump return
23. Retainer, pump ball
24. Screen, pump ball
25. Ball, pump inlet
26. Plug, pump discharge
27. Spring, pump discharge ball
28. Ball assembly, pump discharge
29. Plug, slow speed jet
30. Jet, slow speed
31. Jet, step #80
32. Air bleed, richer
33. Jet, richer
34. Seals, rubber, primary & secondary (2)
35. Main air bleed, primary
36. Screw, primary venturi (2)
37. Venturi booster, primary
38. Gasket, venturi, primary
39. Main air bleed, secondary
40. Screw, secondary venturi (2)
41. Venturi booster, secondary
42. Gasket, venturi, secondary
43. Jet, main, primary #94
44. Screw, valve solenoid (3)
45. Valve, solenoid, coasting
46. Seal, solenoid valve
47. Screw, idle switch (2)
48. Switch, micro, idle

48A. Screw (2) & retainer, window

48B. Gasket, window

48C. Window, fuel sight lever

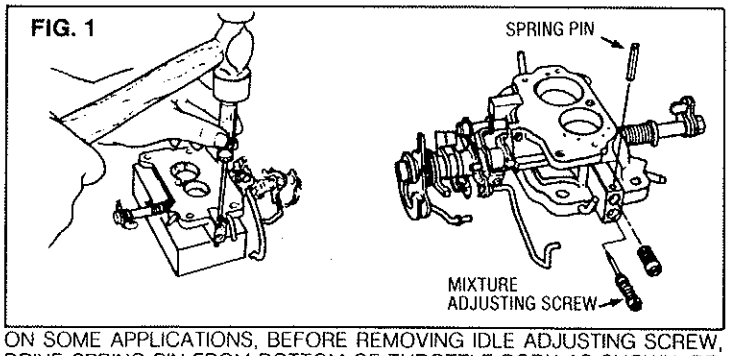
48D. Seal, window

49. Plug, jet, secondary
50. Gasket, plug, jet
51. Jet, secondary
52. Screw (2) & bracket, dashpot
53. Dashpot
54. Pin, cotter, secondary rod (2)
55. Rod & washer (2) secondary
56. Screw, secondary diaphragm (3)
57. Seal, secondary diaphragm assembly
58. Diaphragm assembly, secondary
59. Screw, main body to throttle body (2 short, 1 long)
60. Bracket, spring support
61. Main body
62. Insulator & gasket (2)
63. Screw & spring, idle speed
64. Pin, roll
65. Screw, spring & washer, idle mixture
66. Seal, idle mixture screw
67. Throttle flange assembly

## REMOVAL & INSTALLATION NOTES

1. Cover opening on intake manifold after carburetor is removed.
2. Index jets, springs, and other similar parts and mark their location to ensure proper installation.
3. On carb. models with riveted choke cover, drill rivet heads then drive remainders out using a drift punch.
4. Disassembly of secondary diaphragm (58) is not necessary unless replacement is required.
5. Before removing idle adjusting screw (65), turn in until lightly seated, counting number of turns. Record for proper installation. On some models it may be necessary to remove idle limiter shell before removing idle adjusting screw. Saw idle limiter shell off 12mm from top edge of shell. Also refer to Fig. 1 where applicable.
6. On some carb. models choke assembly cannot be removed until air horn assembly is removed to gain access to the two screws holding tamper resistant guard in place. Note: Make choke diaphragm adjustment before assemblying guard on installation.
7. Install parts and components in reverse order of removal.
8. When installing fuel window retainer (48A), tighten screws evenly. Do not overtighten.
9. When installing choke cover, be sure arm of choke shaft is in contact with hook on choke spring. Rotate choke cover against spring tension. Align mark on cover with index mark on housing.
10. When installing idle adjusting screw (65), turn in until lightly seated, then back out number of turns recorded earlier.

**FIG. 1**




ON SOME APPLICATIONS, BEFORE REMOVING IDLE ADJUSTING SCREW, DRIVE SPRING PIN FROM BOTTOM OF THROTTLE BODY AS SHOWN. RETURN SPRING AT INSTALLATION.

### 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.

## ADJUSTMENT DATA

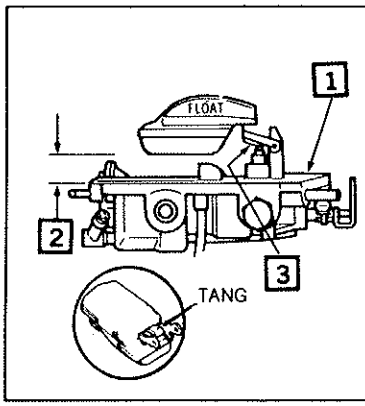



**FIG. 2**
**FLOAT LEVEL ADJUSTMENT**

1. INVERT AIR HORN ASSY. WITHOUT GASKET & ALLOW FLOAT TO REST ON NEEDLE BY ITS OWN WEIGHT.
2. MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEEN TOP OF FLOAT & PARTING SURFACE OF AIR HORN CASTING.
3. TO ADJUST, BEND TANG AS NEEDED.

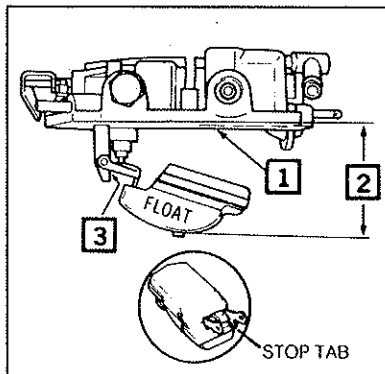



**FIG. 3**
**FLOAT DROP ADJUSTMENT**

1. WITH AIR HORN ASSY. IN UPRIGHT POSITION & GASKET REMOVED, ALLOW FLOAT TO HANG FREELY BY ITS OWN WEIGHT.
2. MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEEN PARTING SURFACE OF AIR HORN & BOTTOM OF FLOAT.
3. IF ADJUSTMENT IS REQUIRED, BEND STOP TAB AS NEEDED.

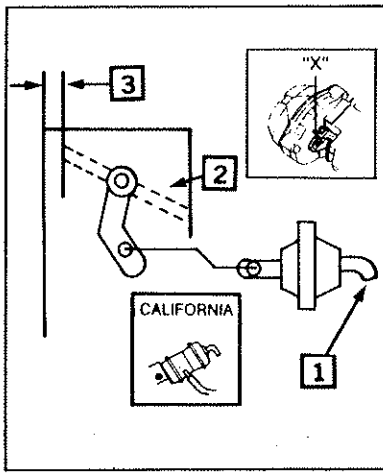



**FIG. 4**
**CHOKE DIAPHRAGM ADJUSTMENT**

1. USING AN OUTSIDE VACUUM SOURCE, APPLY 15.7 INCHES OF VACUUM TO CHOKE DIAPHRAGM.
2. PUSH LIGHTLY ON CHOKE VALVE TO CLOSE IT.
3. MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEEN UPPER EDGE OF CHOKE VALVE & WALL OF AIR HORN.
4. IF ADJUSTMENT IS REQUIRED, BEND LEVER "X" AS NEEDED.

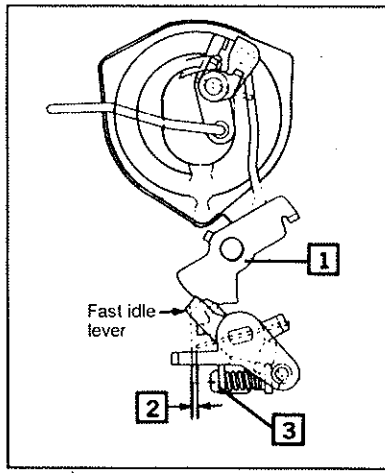



**FIG. 5**
**FAST IDLE CAM ADJUSTMENT (BENCH)**

1. POSITION FAST IDLE CAM ON SECOND STEP.
2. MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEEN THROTTLE VALVE & BORE.
3. IF ADJUSTMENT IS REQUIRED, TURN ADJUSTING SCREW CLOCKWISE TO INCREASE CLEARANCE & COUNTER CLOCKWISE TO DECREASE.

# ADJUSTMENT DATA (Cont'd)

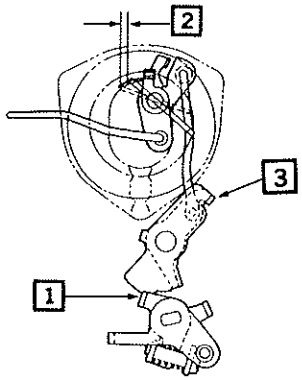



**FIG. 6**
**CHOKE VALVE CLEARANCE ADJUSTMENT**

1. WITH CARBURETOR IN UPRIGHT POSITION, SET ENGAGEMENT LEVER TO SECOND STEP FROM HIGH STEP OF FAST IDLE CAM.
2. MEASURE SPECIFIED CLEARANCE (SEE SPEC. CHART) BETWEEN WALL OF AIR HORN & TOP OF CHOKE VALVE.
3. IF A SMALL ADJUSTMENT IS REQUIRED, BEND TANG. *NOTE: IF A LARGE ADJUSTMENT IS NEEDED, BEND CHOKE ROD.*

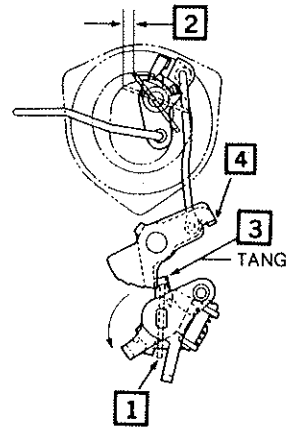



**FIG. 7**
**CHOKE UNLOADER ADJUSTMENT**

1. MOVE THROTTLE VALVE TO WIDE OPEN POSITION & MAINTAIN, THUS RELEASING CHOKE VALVE TO UNLOADER POSITION.
2. MEASURE SPECIFIED CLEARANCE (SEE SPEC. CHART) BETWEEN TOP OF CHOKE VALVE & WALL OF AIR HORN.
3. IF ADJUSTMENT IS REQUIRED, BEND TANG AS NEEDED.
4. *SOME MODELS:* BEND TAB TO ADJUST.

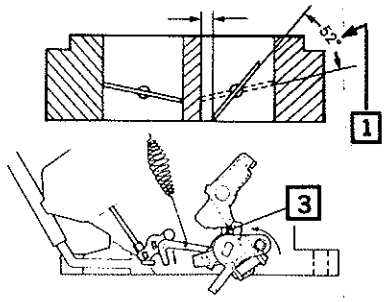



**FIG. 8**
**SECONDARY THROTTLE VALVE OPENING ADJUSTMENT**

1. OPEN PRIMARY THROTTLE VALVE TO AN ANGLE OF 52° AT WHICH POINT THE SECONDARY THROTTLE VALVE SHOULD START TO OPEN & SHOULD BE FULLY OPEN WHEN THE PRIMARY VALVE IS WIDE OPEN.
2. MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEEN PRIMARY THROTTLE VALVE & WALL OF THROTTLE BORE (AS SHOWN) WHEN SECONDARY VALVE STARTS TO OPEN.
3. IF ADJUSTMENT IS REQUIRED, BEND TANG AS NEEDED.

## SPECIFICATION CHART[1]

| Year | Application | Float Level Adj. Fig. 2 | Float Drop Adj. Fig. 3 | Choke Diaph. Adj. Fig. 4 | Fast Idle Cam (Bench) Adj. Fig. 5 | Choke Valve Clearance Adj. Fig. 6 | Choke Unloader Adj. Fig. 7 | Sec. Throttle Valve Opening Adj. Fig. 8 | Idle Speed R.P.M. Slow |
|---|---|---|---|---|---|---|---|---|---|
| **MAZDA** | | | | | | | | | |
| 1986 | B2000 Pick-Up | 11.5—12.5 | 46—47 | 1.68—2.14 | .75—1.13 | .60—1.0 | 2.74—3.6 | 7.35—8.25 | 800[2] |
| 1985 | 626 —2.0L Eng. | 13.5 | 49 | 1.7—2.2 | .70—1.1 | .60—1.0 | 2.85—3.65 | 6.2—7.2 | [3] |
| 1984 | 626 —2.0L Eng. | 13.5 | 46 | 1.7—2.2 | .70—1.1 | .60—1.0 | 2.85—3.65 | 6.2—7.2 | [3] |
| 1983 | 626 —2.0L Eng. | 10.0 | 46 | 1.7—2.2 | .70—1.1 | .60—1.0 | 2.85—3.65 | 6.2—7.2 | [3] |
| 1982 | 626 —2.0L Eng. | 11.5 | 46 | 1.45—1.95 | .45—.75 | .65—1.05 | 2.65—3.45 | 6.2—7.2 | 650[2] |
| 1981 | 626 —2.0L Eng. | 11.5 | 46 | 1.45—1.95 | .45—.75 | .65—1.05 | 2.65—3.45 | 6.2—7.2 | 650[2] |
| 1980 | 626 —2.0L Eng. | 11.0 | 46 | 1.6—2.0 | .50—.66 | .60—.95 | 2.6—3.4 | 6.75 | 650 |
| 1979 | 626 —2.0L Eng. | 11.0 | 46 | .90—1.25 | .90—1.1 | .60—.95 | 2.6—3.4 | 6.75 | 650 |

**FOOTNOTES:**

[1] Dimensions are given in millmeters.
[2] Automatic Transmission in "D" range.
[3] Automatic Transmission set 700 RPM in "D" range. Manual Transmission set 750 RPM.