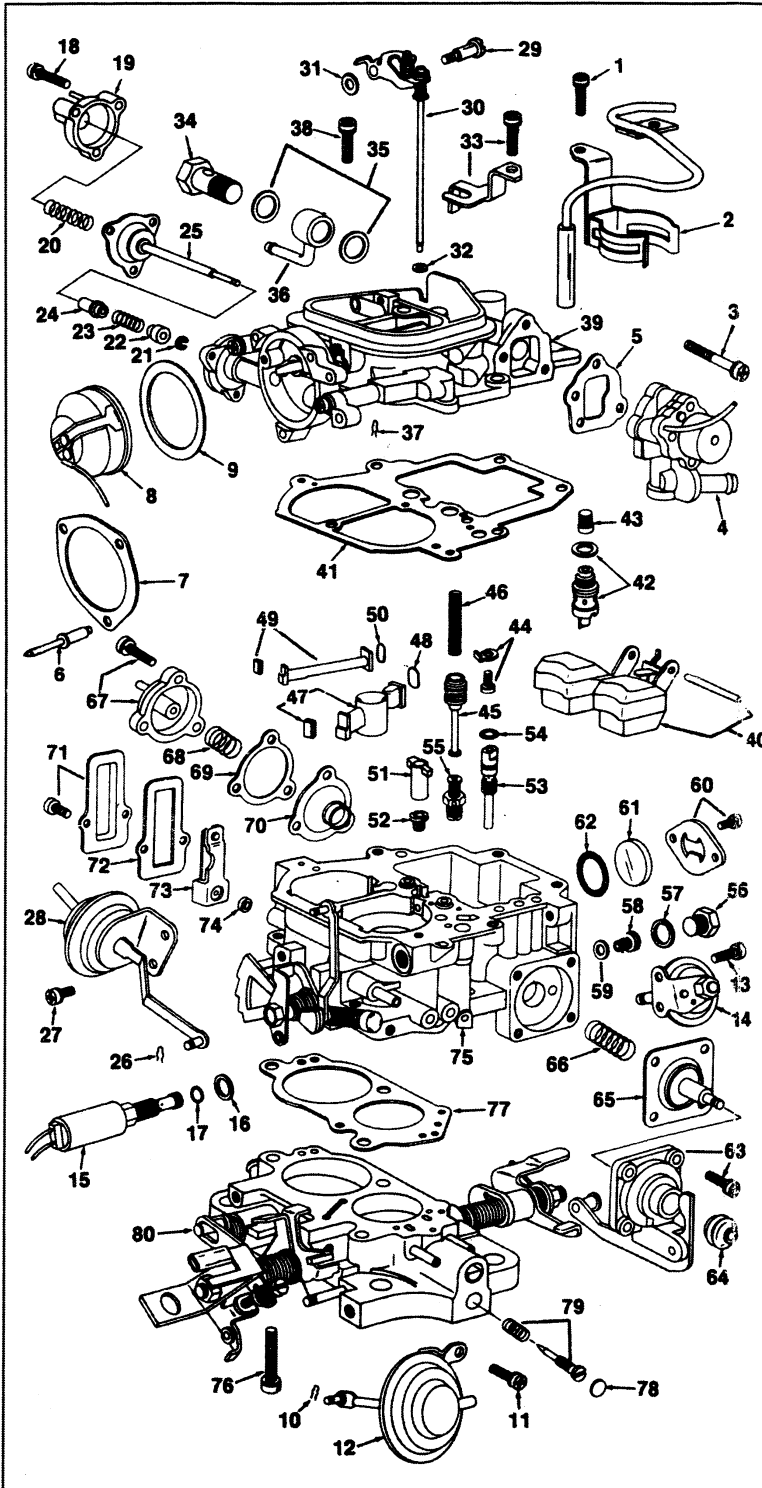


FUEL SYSTEM

SERVICE INSTRUCTION WORKSHEET

TO REPAIR

AISAN CARBURETOR
2 BARREL TOYOTA
22R ENGINE



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.
6. **Cover opening on intake manifold after carburetor is removed.** Place carburetor parts in cleaning solvent.

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.

PARTS LIST

- | | |
|--------------------------------------|---|
| 1. Screw, bracket & tube assembly | 41. Gasket, air horn |
| 2. Bracket & tube assembly | 42. Needle, seat & gasket assembly |
| 3. Screw, solenoid assy. bowl vent | 43. Filter, fuel inlet |
| 4. Solenoid assembly, bowl vent | 44. Screw & retainer, power piston |
| 5. Gasket, solenoid assy., bowl vent | 45. Power piston |
| 6. Rivet, choke retainer (3) | 46. Spring, power piston |
| 7. Retainer ring, choke | 47. Retainer & venturi, primary |
| 8. Cover assembly, choke | 48. "O" ring, venturi, primary |
| 9. Gasket, choke cover | 49. Retainer & venturi, secondary |
| 10. Clip, throttle positioner stem | 50. "O" ring, venturi, secondary |
| 11. Screw, throttle positioner (2) | 51. Guide, metering rod |
| 12. Throttle positioner assembly | 52. Jet, main, secondary |
| 13. Screw & bracket, dashpot | 53. Jet, slow speed |
| 14. Dashpot assembly | 54. "O" ring, slow speed jet |
| 15. Solenoid, idle cut-off | 55. Power valve |
| 16. Gasket, solenoid | 56. Plug, main jet, primary |
| 17. "O" ring, solenoid | 57. Gasket, plug |
| 18. Screw, vacuum break cover (3) | 58. Jet, main, primary |
| 19. Cover, vacuum break | 59. Gasket, main jet, primary |
| 20. Spring, vacuum break | 60. Screw (2) & window retainer |
| 21. Retainer, diaphragm stem | 61. Window, fuel level |
| 22. Bushing, outer | 62. "O" ring, window seal |
| 23. Spring, diaphragm rod | 63. Screw (4) & pump cover |
| 24. Bushing, inner | 64. Boot, pump shaft |
| 25. Diaphragm & rod assembly | 65. Diaphragm assembly, pump |
| 26. Clip, choke opener rod | 66. Spring, pump discharge |
| 27. Screw, choke opener (2) | 67. Screw (3) & aux. pump cover |
| 28. Choke opener assembly | 68. Spring, aux. pump diaphragm |
| 29. Screw, sec. metering rod assy. | 69. Gasket, aux. pump diaphragm |
| 30. Sec. metering rod assembly | 70. Diaphragm, aux. pump |
| 31. Washer, sec. metering rod assy. | 71. Screw & cover, idle compensator |
| 32. Seal, plastic, metering rod | 72. Gasket, idle compensator |
| 33. Screw & bracket, fuel union | 73. Valve, idle compensator |
| 34. Bolt, special, fuel union | 74. Seal, valve, idle compensator |
| 35. Gasket, fuel union (2) | 75. Main body |
| 36. Union, universal, fuel | 76. Screw (3) to main body to throttle body |
| 37. Clip, upper, fast idle link | 77. Gasket, main body to throttle body |
| 38. Screw, air horn (2) | 78. Plug, idle mixture |
| 39. Air horn assembly | 79. Screw & spring, idle mixture |
| 40. Float & hinge pin assembly | 80. Throttle body assembly |

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

DISASSEMBLY—ASSEMBLY NOTES

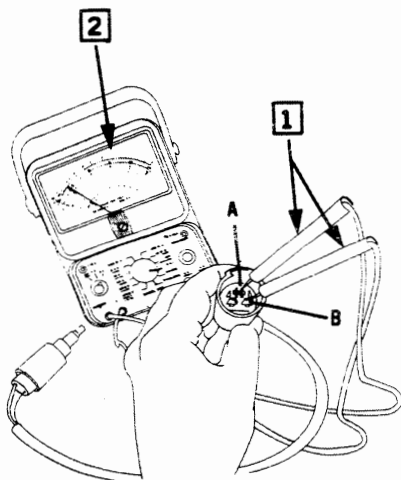
1. MEASURE AND RECORD FLOAT LEVEL SETTING BEFORE DISMANTLING FLOAT ASSY. (40). REMEMBER THAT THE FLOAT UNIT IS SUBJECT TO POSSIBLE FUEL ABSORPTION. IF IN DOUBT, REPLACE WITH A NEW ONE.
2. MARK OR INDEX PARTS ESPECIALLY WHERE SIMILARITIES EXIST, ALSO NOTE SPRING LOCATION POINTS TO INSURE CORRECT RE-ASSEMBLY.
3. RETAIN ALL OLD GASKETS FOR MATCHING PURPOSES. RE-ASSEMBLE WITH ALL NEW APPLICABLE GASKETS.
4. TO REMOVE CHOKE COVER (8), USE APPROPRIATE SIZE DRILL TO REMOVE RIVET HEADS (6) THEN DRIVE OUT REMAINDER USING A DRIFT.
5. TO REMOVE IDLE MIXTURE PLUG (78), DRILL SMALL HOLE IN CENTER AND TURN IN SCREW END OF SMALL SLIDE HAMMER PULLER. EXERCISE CAUTION SINCE THERE IS ONLY A .040" CLEARANCE BETWEEN PLUG AND MIXTURE SCREW. CAREFULLY DRIVE OUT PLUG. HOWEVER IF THE ABOVE TECHNIQUE IS IMPRACTICAL, PRY PLUG LOOSE USING A POINTED TOOL AFTER FIRST DRILLING SMALL HOLE.
6. BEFORE REMOVING MIXTURE SCREW (79), MARK POSITION, TURN IN UNTIL LIGHTLY SEATED COUNTING NUMBER OF TURNS, TURN OUT TO INDEX MARK. RECORD NUMBER OF TURNS FOR RE-ASSEMBLY & REMOVE.
7. TIGHTEN FUEL WINDOW RETAINER SCREWS (60) DOWN EVENLY. DO NOT OVER TIGHTEN.
8. CHECK THROTTLE LINKAGE FOR FREEDOM OF MOVEMENT BEFORE AND AFTER INSTALLING CARBURETOR ON ENGINE.

OPERATIONAL — TESTING CHECKS

**FIG. A
SOLENOID, IDLE
CUT-OFF**

RESISTANCE CHECK

1. WITH BATTERY VOLTAGE DISCONNECTED, HOOK UP TEST PROBES TO TERMINALS A & B FROM A MULTI-METER. SET SELECTOR KNOB TO RX-1 SCALE TO MEASURE RESISTANCE.
2. THE MEASURED RESISTANCE SHOULD READ APPROXIMATELY 80 OHMS. NOTE: IF A WIDE VARIATION IN READING EXISTS, SOLENOID SHOULD BE REPLACED.

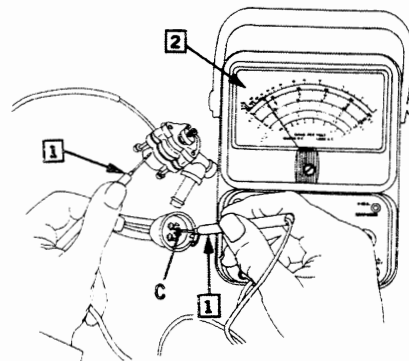


OPERATIONAL CHECK

1. DISCONNECT MULTI-METER AND CONNECT BATTERY VOLTAGE SOURCE ACROSS TERMINALS A & B.
2. AFTER VOLTAGE IS APPLIED, DISCONNECT TERMINALS A & B AT WHICH TIME YOU SHOULD FEEL A DISTINCT CLICK WITHIN THE SOLENOID.

**FIG. B
SOLENOID, BOWL
VENT CHECK**

1. HOOK UP TEST PROBES TO TERMINAL C & SOLENOID COVER (GROUND) FROM A MULTI-METER (AS SHOWN). SET SELECTOR TO RX-1 SCALE TO MEASURE RESISTANCE.
2. THE RESISTANCE MEASURED SHOULD READ APPROXIMATELY 63-73 OHMS. AT 68° F.

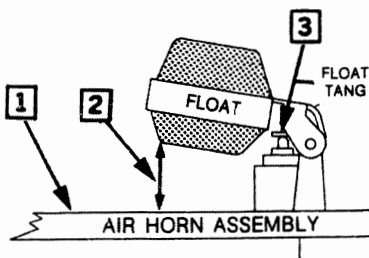


ADJUSTMENT DATA

**FIG. C
FLOAT LEVEL
ADJUSTMENT**

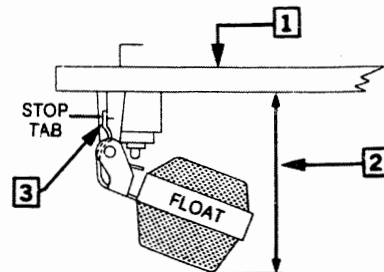
DRY

1. WITH AIR HORN ASSY. INVERTED (WITHOUT GASKET), FLOAT TANG SHOULD REST ON NEEDLE OF ITS OWN WEIGHT.
2. MEASURE DISTANCE BETWEEN SURFACE OF AIR HORN CASTING AND TOP OF FLOAT AS SHOWN.
3. IF ADJUSTMENT IS REQUIRED, BEND FLOAT TANG. NOTE: EXCESSIVE PRESSURE TO NEEDLE TIP WILL CAUSE DAMAGE AND/OR A FALSE READING WILL RESULT.



**FIG. D
FLOAT DROP
ADJUSTMENT**

1. HOLD AIR HORN ASSY. UP RIGHT (WITHOUT GASKET).
2. MEASURE DISTANCE AS SPECIFIED BETWEEN PARTING SURFACE OF AIR HORN AND BOTTOM OF FLOAT.
3. TO ADJUST, BEND BOTH STOP TABS EQUALLY.



WET

WITH ENGINE AT NORMAL OPERATING TEMPERATURE, OBSERVE FUEL LEVEL IN SIGHT GLASS. THE CORRECT FUEL LEVEL SHOULD BE ABOUT MID-POINT IN SIGHT GLASS.

ADJUSTMENT DATA (Cont'd)

FIG. E
UNLOADER ADJUSTMENT
BUBBLE PROTRACTOR
INSTRUCTIONS

PLACE BUBBLE PROTRACTOR ON A FLAT HORIZONTAL SURFACE. LINE UP POINTER WITH A ZERO DEGREE MARK ON SCALE. LOCK IN PLACE. NEXT, CENTER BUBBLE ON SPIRIT LEVEL, ALSO LOCK IN PLACE. NEXT, UNLOCK POINTER AND MOVE TO SPECIFIED ANGLE AS SHOWN IN SPEC. CHART, AGAIN LOCK IN PLACE. PROTRACTOR IS NOW READY FOR USE.

1. MOUNT CARBURETOR ON A HOLDING FIXTURE AND POSITION UNIT ON A HORIZONTAL PLANE.
2. WITH FAST IDLE CAM FULLY RELEASED, MOVE THROTTLE VALVE TO WIDE OPEN POSITION. THROTTLE LEVER UNLOADER TANG SHOULD CONTACT AND MOVE FAST IDLE CAM CAUSING THE CHOKE VALVE TO ROTATE TO UNLOADER POSITION.
3. PLACE PROTRACTOR ON CHOKE VALVE AS SHOWN.
4. IF BUBBLE IS NOT CENTERED, ADJUSTMENT IS REQUIRED. BEND THROTTLE LEVER TANG AS SHOWN UNTIL BUBBLE IS CENTERED.

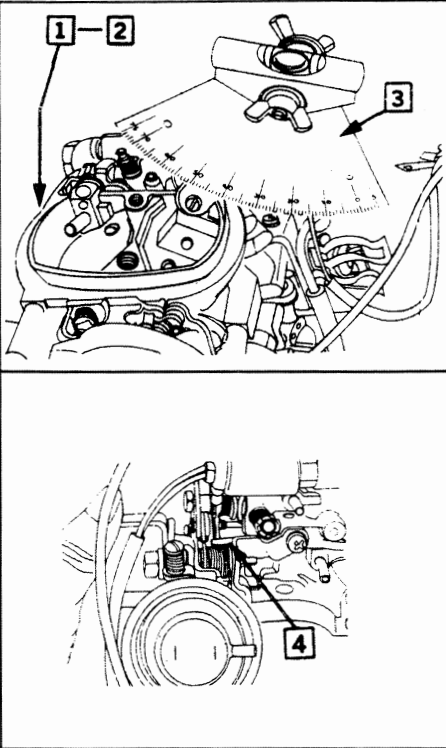
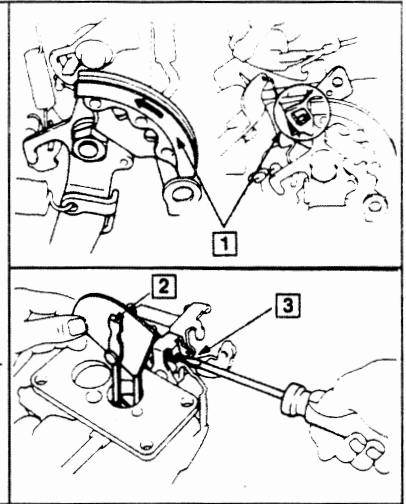


FIG. H
FAST IDLE SETTING
ADJUSTMENT

1. SET THROTTLE SHAFT LEVER TO THE FIRST STEP OF FAST IDLE CAM.
2. WITH CHOKE VALVE FULLY CLOSED, MEASURE CLEARANCE BETWEEN PRIMARY THROTTLE VALVE AND BODY, OR MEASURE ANGLE OF PRIMARY THROTTLE VALVE.
3. TO ADJUST, TURN FAST IDLE ADJUSTING SCREW AS NEEDED.



SPECIFICATIONS BY APPLICATION¹

Year	MODEL	Float Level Adj.	Float Drop Adj.	Unloader Adj.	Idle Mixture Adjuster Screw	Idle Speed	
						Slow	Fast
TOYOTA TRUCK							
88-84	22R Eng. Carb. Nos. 21100-35290, 291, 301, 302, 310, 390, 410, 430, 440	.386	1.89	45°	3½	2	23°
TOYOTA TRUCK							
88-81	22R Eng. Carb. Nos. 21100-35010, 050, 060, 070, 071, 080, 090, 100, 110, 120, 160, 161, 170, 171; 21100-35210, 211, 230, 231, 240, 250, 260, 270, 280, 300	.413	1.89	50°	4½	2	24°
TOYOTA							
83	22R Eng.—Celica Carb. Nos. 21100-35210	.413	1.89	50°	4½	2	22°
82-81	22R Eng.—Celica, Corona Carb. Nos. 21100-33070, 170; 21100-35021, 031, 041, 070, 071, 090, 150, 151, 160, 170, 180, 220, 221	.413	1.89	45°	2½	2	24°

¹ Specification data in decimal equivalents.

² Automatic transmission 790 RPM; manual transmission 740 RPM.