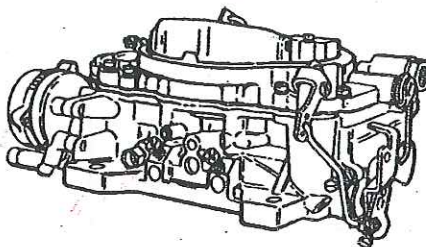


INSTRUCTION SHEET OFF VEHICLE CARBURETOR SERVICE CARTER MODEL-AFB

50-370-3



I. DISASSEMBLY.

a. Disassemble in the order of index numbers on the exploded view drawing on opposite side of sheet. Disassembly need not be carried further than parts exploded on the drawing unless additional parts require replacement.

b. Notice the holes from which linkage rods are removed so they can be returned to the same locations during reassembly.

II. CLEANING.

NOTE: Do not soak leather, rubber or other parts of this nature in the cleaning solvent.

Soak parts long enough to soften and remove all foreign material. Use a regular carburetor cleaning solvent, lacquer thinner, or denatured alcohol. Use a small brush to aid cleaning, if necessary. Make certain the throttle body is free of all hard carbon deposits. Blow out all passages in castings with compressed air, and check carefully to insure thorough cleaning of obscure areas.

III. REASSEMBLY.

Reassemble the carburetor using essentially the reverse order of disassembly. Refer to paragraph I b, when installing linkage rods.

ADJUSTMENTS

IV. FLOAT SETTING ADJUSTMENT. (See figure 1.)

With air horn held upside down; air horn gasket and floats in place, measure the distance between edges of floats and gasket surface at outer ends. Refer to Adjustment Data Table for proper gage. Adjust by carefully bending float bracket and make sure that floats are properly aligned to avoid interference in the bowl.

V. FLOAT DROP ADJUSTMENT. (See figure 2.)

With air horn held upright and level, measure at location shown (gasket in place). Adjust to dimension listed in Adjustment Data Table by bending float stop tabs on float bracket.

VI. PUMP ADJUSTMENT. (See figure 3.)

a. Back out throttle stop screw until primary throttle valves seat in bores. The distance from top of pump plunger rod to air horn should be as listed in Adjustment Data Table.

b. Insert rod in lever hole listed in Adjustment Data Table ("a", "b" or "c").

c. Adjust by bending pump rod at location shown in figure 3.

VII. CHOKE PISTON LINKAGE ADJUSTMENT.

a. TYPE I (see figure 4). Hold choke valve closed and measure clearance between stop in choke piston housing and choke lever. This distance should be as listed in Adjustment Data Table. To adjust bend choke connector rod, which will be positioned at slightly different locations for some carburetors, or set lever on countershaft if lever has a clamp screw.

b. TYPE II. Keep fast idle cam from touching adjusting screw by blocking throttle approximately half open. With choke valve open place a .026 wire gage (made by bending a .026 diameter wire at a 90° angle 1/8-inch from end) between bottom of slot in piston and top of slot in choke piston cylinder. Holding the .026 wire gage in position, close choke valve until resistance is felt. The distance between top of choke valve and air horn should be the same as given in Adjustment Data Table. To adjust, bend choke connector rod.

c. TYPE III. Keep fast idle cam from touching the adjusting screw by holding throttle open. When holding the choke valve closed, the top of the choke piston should be flush with the top of the piston cylinder. To adjust, bend the choke connector rod.

VIII. FAST IDLE LINKAGE ADJUSTMENT. (See figures 5 and 6.)

Methods of performing this adjustment vary between carburetors and car models. The first type of adjustment is made as follows:

a. Hold choke valve closed and fast idle cam against stop on carburetor housing. The clearance between the two levers on end of choke shaft should be as listed in Adjustment Data Table. (See figure 5.) To adjust, bend fast idle rod as shown.

b. The second method is different because of the index mark on fast idle cam. (See figure 6.) When the mark is present, adjust as follows: Hold choke lever closed and make sure that the two levers on end of choke shaft are in contact with each other. Hold parts in this manner and align end of fast idle screw with index mark on fast idle cam. To adjust, bend fast idle rod as shown.

IX. FAST IDLE VALVE CLEARANCE: (See figure 7.)

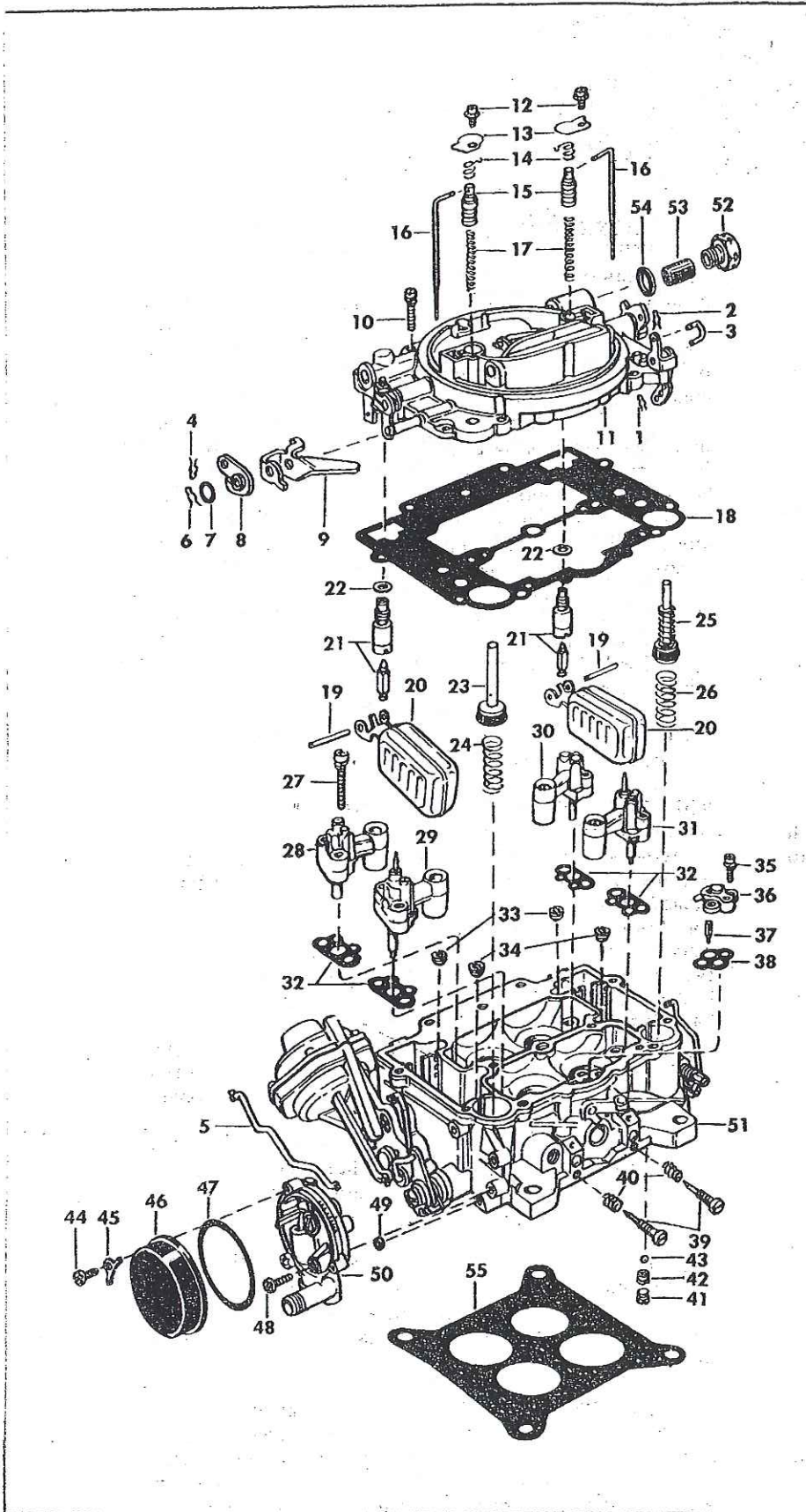
Hold choke valve closed tightly and tighten fast idle adjusting screw until clearance between carburetor bore and edge of throttle valve is as specified in Adjustment Data Table.

X. UNLOADER ADJUSTMENT. (See figure 5.)

Open primary throttle valves wide and check clearance between upper edge of choke valve and inner wall of air horn. This distance should be as listed in Adjustment Data Table. To adjust, bend the unloader lip, which can be seen in figure 5.

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO
INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET



REF.
NO.

NOMENCLATURE

- | | |
|----|--|
| 1 | Pin spring |
| 2 | Pin spring |
| 3 | Pump link |
| 4 | Pin spring |
| 5 | Choke connector rod |
| 6 | Pin spring |
| 7 | Dashpot lever washer |
| 8 | Outer-dashpot arm |
| 9 | Inner-dashpot arm |
| 10 | Screw and lock washer assy |
| 11 | Air horn assy |
| 12 | Screw and lock washer assys |
| 13 | Step-up piston covers |
| 14 | Step-up rod retaining springs |
| 15 | Vacuum pistons |
| 16 | Step-up rods |
| 17 | Vacuum piston springs |
| 18 | Air horn gasket |
| 19 | Float pin |
| 20 | Float assys |
| 21 | Needle and seat assys |
| 22 | Needle seat gaskets |
| 23 | Dashpot plunger assy |
| 24 | Dashpot plunger spring |
| 25 | Pump plunger assy |
| 26 | Pump return spring |
| 27 | Screw and lock washer assy |
| 28 | Secondary venturi assy —
choke side |
| 29 | Primary venturi assy —
choke side |
| 30 | Secondary venturi assy —
pump side |
| 31 | Primary venturi assy —
pump side |
| 32 | Venturi cluster gaskets |
| 33 | Secondary metering jets |
| 34 | Primary metering jets |
| 35 | Screw and lock washer assy |
| 36 | Pump jet housing |
| 37 | Pump discharge needle |
| 38 | Pump jet housing gasket |
| 39 | Idle adjusting screws |
| 40 | Idle adjusting screw springs |
| 41 | Pump intake passage plug |
| 42 | Pump intake ball seat |
| 43 | Pump intake ball |
| 44 | Screw |
| 45 | Coil housing retainer |
| 46 | Thermostatic coil and housing
assy |
| 47 | Coil housing gasket |
| 48 | Screw |
| 49 | Choke piston housing assy |
| 50 | Choke piston housing gasket |
| 51 | Carburetor body assy |
| 52 | Fuel inlet fitting |
| 53 | Fuel inlet strainer |
| 54 | Fuel inlet fitting gasket |
| 55 | Flange gasket |

INSTRUCTION SHEET

CARTER MODEL AFB CARBURETOR

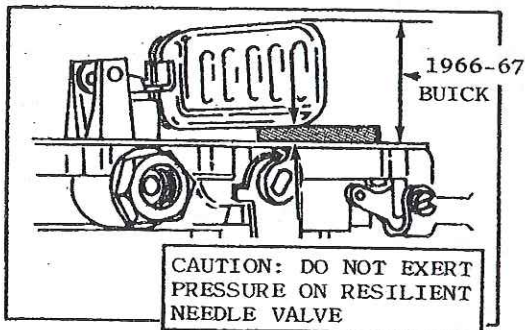
(CONT.)

XI. AUTOMATIC CHOKE SETTING.

Set automatic choke so that choke valve will close with a light tension in air intake bore with unit at room temperature (70° F to 80° F).

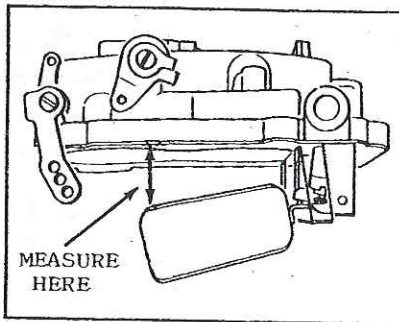
XII. IDLE ADJUSTMENT. (See figure 8.)

Adjust stop screw (1) to crack valve slightly. Start engine. Adjust mixture screw (2) until engine idles smoothly. Readjust stop screw (1) to idle engine at approximately 450 rpm; then readjust mixture screw (2). (Most high-performance engines idle at 500 rpm.)



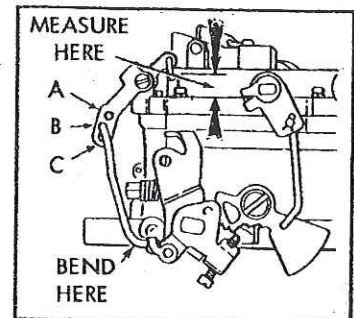
FLOAT LEVEL

Fig.1



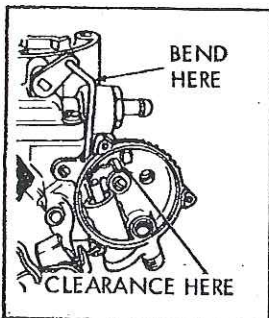
FLOAT DROP

Fig.2

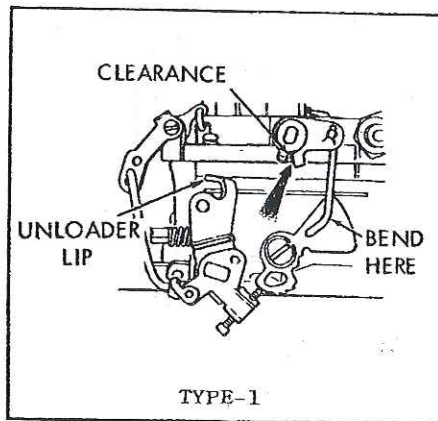


PUMP ADJ.

Fig.3

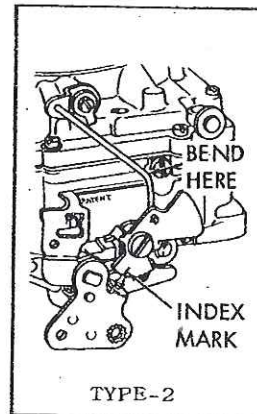


CHOKE PISTON LINKAGE ADJ. Fig.4



FAST IDLE LINKAGE ADJ.

Fig.5

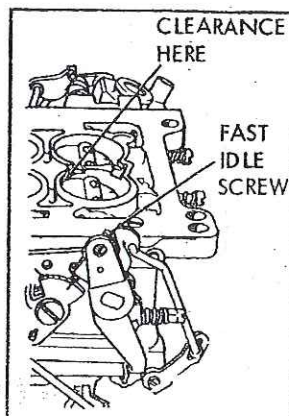


FAST IDLE LINKAGE ADJ. Fig.6

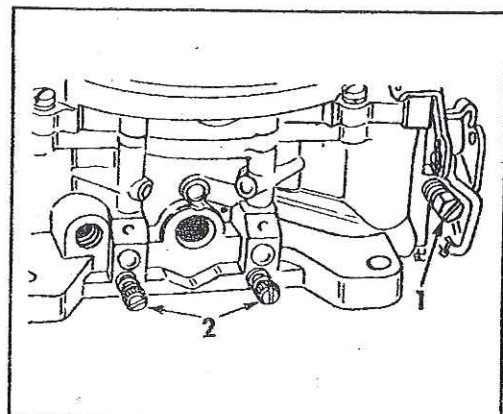
TYPE-3

FAST IDLE SCREW ON SECOND STEP AGAINST SHOULDER OF FIRST. HOLDING CHOKE VALVE TOWARD CLOSED POSITION, MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL. (SEE DATA TABLE FOR MEASUREMENT.)

FAST IDLE LINKAGE ADJ.



FAST IDLE ADJ. Fig.7



IDLE ADJ.

Fig.8

ADJUSTMENT DATA TABLE

Year	Make	Model	Fast Idle Linkage Adj. (Type, Dimen.)	Fast Idle Valve Dimen.	Fast Idle Valve Setting	Un. Dimen.	Sec. Throttle Lever Step	Slow Idle P.P.M. (R.P.M.)	Idle P.P.M. (R.P.M.)	Fast Idle Valve R.R. (New Ref.)		
1967	American	Mits. 300, 343, 390, 400, 423, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000										

Abbreviations
 S/T = Standard Transmission
 C.A.P. = Clean Air Package
 A/T = Automatic Transmission
 N = Neutral
 R = Rich
 L = Low Step of Fast Idle Cam
 H = High Step of Fast Idle Cam
 M = Manual
 F = Front
 R = Rear
 W/C.A.P. = w/Clean Air Package
 A/R = Air Injection Reactor
 A.G.P. = Air Guard Package
 Step 1 - Secondary Throttle Valve Should Just Start to Open When There is (See Data Table) Between Lower Edge of Primary Throttle Valve and Bore of Carburetor. To Adjust Bend Connector Link.
 Step 2 - Primary and Secondary Throttle Valves Tightly Closed, Check Clearance Between Levers. To Adjust Bend Shoe on Lever.