

FUEL SYSTEM

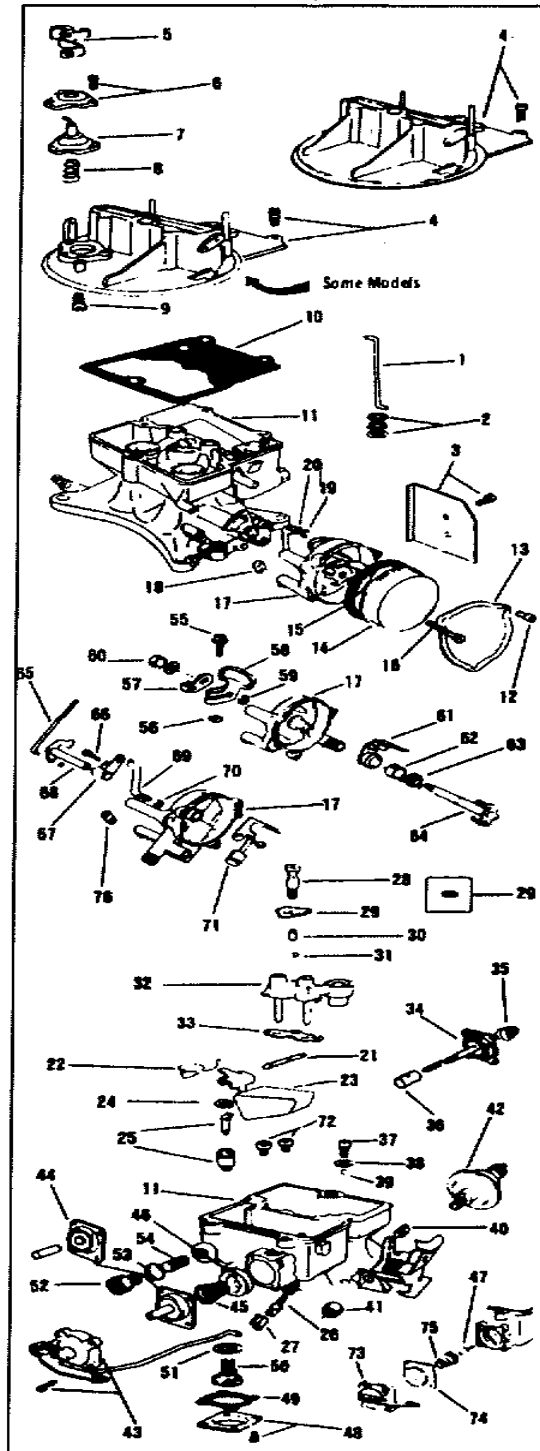
SERVICE INSTRUCTION WORKSHEET

TO REPAIR
FORD
CARBURETOR
2 Barrels — Type 2100

GF3401-9

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

EXPLODED VIEW



76 Gasket

PARTS LIST

1	Operating Choke Rod
2	Washers, (1 Felt & Brass (2)
3	Shield & Screw
4	Air Horn & Screw
5	Diaphragm Link
6	Cover & Screw
7	Diaphragm Assy. (C.P.A.)*
8	Spring
9	Stop Screw
10	Air Horn Gasket
11	Main Body
12	Choke Cover Screw
13	Retainer
14	Choke Thermostat Housing
15	Gasket
16	Screw
17	Choke Housing
18	Gasket
19	Retainer
20	Washer
21	Float Pin
22	Retainer
23	Float
24	Baffle Washer (Some Models)
25	Needle & Seat Assy.
26	Idle Mixture Screw
27	Limiter Cap
28	Pump Discharge Screw
29	Air Distribution Plate
29A	Gasket (Some Models)
30	Weight
31	Ball Check
32	Booster Venturi
33	Gasket
34	Diaphragm
35	Spring
36	Sleeve
37	Main Body Screw
38	Washer
39	Ball Check
40	Pump Rod Retainer
41	Dashpot Nut
42	Dashpot
43	Diaphragm Cover & Screw
44	Diaphragm
45	Spring
46	Cavity Spacer
47	Umbrella Check Valve
48	Cover & Screw
49	Gasket
50	Economizer
51	Gasket
52	Fitting
53	Gasket
54	Screen
55	Screw
56	Nut
57	Cam Choke Lever
58	Choke Overtravel Lever
59	Retainer
60	Choke Shaft Nut & Washer
61	Spring Lever
62	Liner
63	Torsion Spring
64	Choke Shaft
65	Choke Rod
66	Adjusting Screw
67	Fast Idle Cam Lever
68	Choke Housing Shaft & Lever
69	Fast Idle Cam Rod
70	Retainer
71	Piston & Link
72	Main Jets
73	Cover Accel. Pump
74	Diaphragm Accel. Pump
75	Spring

*Choke Pull-off Assy.

HOW TO USE THIS INSTRUCTION SHEET

1. This worksheet has been designed to simplify your use of the **REPAIR KIT** to tune-up a carburetor. It is set up so that you can follow each step by checking it off as you perform it. If you are interrupted any time during your work, you will know where you are when you get back to it.

2. The steps of disassembly are shown in numerical order. Parts are illustrated at right and are identified in numerical sequence in order to make it easy to find. Thus the first part to be removed is at the top of this list and can be found in the exploded drawing by its number designation. To reassemble proceed from the bottom of the list and check off operations in the right hand column.

3. The items contained in this kit are sufficient to replace the most frequently worn parts in the carburetor. The list of parts shown on this sheet DOES NOT reflect the contents of the kit.

4. This instruction sheet is applicable to all carburetors of this type. Since the illustration (Exploded View) is typical and minor variations occur between the different models, procedures will be essentially as described and the differences will be easily recognized. This kit may contain extra parts which are applicable to other carburetors in this group. Substitute identical replacement parts for original worn parts found on carburetor.

5. Cover manifold hole while the carburetor is off to prevent dust and dirt from entering.

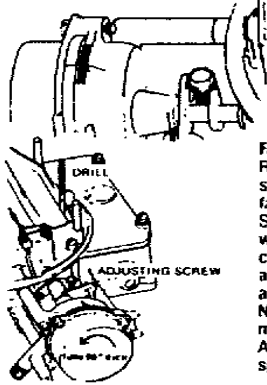
6. Soak throttle body, air horn assembly and carburetor body in carburetor cleaner for about ten minutes. Remove carbon and all loose particles using a stiff bristle brush.

7. CAUTION: Do not use any abrasives to clean carburetor parts. Items made of rubber, leather, nylon or plastic are not to be soaked in carburetor cleaner.

8. Put small parts in strainer and allow to soak in a carburetor cleaner. Dry and place on paper towel.

9. Remove parts from solvent; blow out all passages and jets with air gun.

CHOKE ADJUSTMENTS (Cont.)

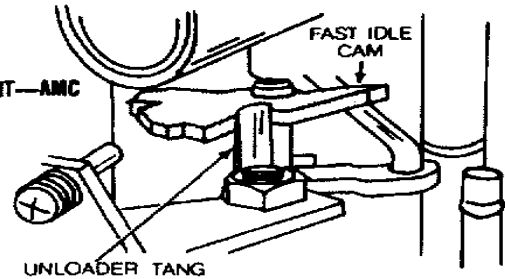


AUTOMATIC CHOKE COVER
Refer to Specification Chart for correct settings.

FAST IDLE CAM ADJUSTMENT

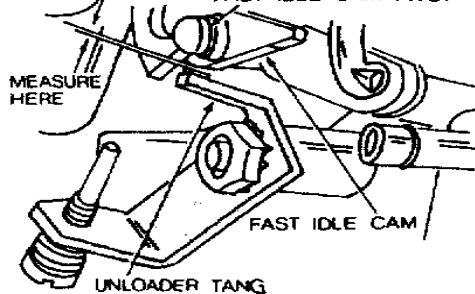
Rotate choke cover 90° left (Rich) from regular setting. Locate fast idle screw at index mark of fast idle cam. Using correct drill or gauge, (see Specification Chart) measure clearance between wall of airhorn and bottom edge of choke valve. If correction is required, turn fast idle cam lever adjusting screw clockwise to increase clearance and counterclockwise to decrease clearance.
NOTE: Be sure last idle screw remains on index mark on fast idle cam during this adjustment. Also readjust automatic choke to agree with specification.

UNLOADER ADJUSTMENT—AMC



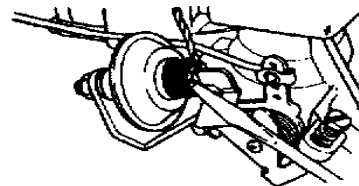
Position throttle valve wide open and apply hand pressure on the choke valve toward closed position. Measure clearance between lower edge of choke valve and wall of air horn. Clearance must be as specified (See Specification Chart). If adjustment is required, bend unloader tang which contacts fast idle cam. **NOTE:** Do not pry unloader tang downward from a horizontal plane.

UNLOADER-TO-FAST IDLE CAM CLEARANCE



Following Unloader Adjustment, throttle must be opened to position unloader tang directly beneath fast idle cam pivot. The measured clearance between unloader tang and edge of fast idle cam must read .070". Next, move throttle through operating range to make sure unloader tang does not interfere with any part of carburetor linkage. After carburetor is installed on vehicle, check for full throttle travel when accelerator pedal is depressed.

DASH POT ADJUSTMENTS



With throttle valves adjusted, press plunger down then use drill bit as illustrated for adjustment.

American Motors

Year	Drill Size
1968-75	3/32 in.
1969	9/64 in.
1970-74	1/8 in.

INSTALLATION NOTE

Be sure to coat Umbrella Check Valve (47) with grease, then carefully push into casting until fully seated.

IDLING SPECIFICATIONS & PROCEDURES

1957-69 ALL MODELS

Curb Idle

Mixture screws: Set for smoothest idle, except on cars equipped w/smog control device which are equipped w/limiter caps. All cars w/S.T. equipped w/smog control device "curb idle" at 625 in neutral & w/A.T. 550; without smog control device S.T. should be set at 550-600 neutral & A.T. at 475-500 in drive. While this operation is taking place, on 1968-69 models; make sure headlights are "on", A.T. in drive, air conditioned (if equipped) at maximum cooling and air cleaner installed exc. on 302 eng. where air conditioning must be "OFF."

Fast Idle

All readings must be made in "neutral," w/manual choke set to 1200 RPM at "V" on fast idle cam. 1964 & earlier w/automatic choke, set at 1200 standard trans. at "V" on cam; automatic trans. set at 1800.

1964 & later models standard trans. at 1300 RPM on kickdown step; automatic trans. 1500 RPM at kickdown step.

1970-73 MODELS: AMERICAN MOTORS

Idle Speed & Mixture

Engine must be at normal operating temperature with air conditioner OFF and auto transmission in drive. Adjust idle stop screw or solenoid throttle positioner (if used) for applicable hot idle speed (see Specification Chart). Initially set idle mixture screws in full rich (counterclockwise) position, then rotate both idle mixture equally clockwise until idle speed falls off, finally turn both screws out until the lean best idle (highest R.P.M.) adjustment is obtained. However, if idle speed changed more than 30 R.P.M. during this adjustment, repeat the above procedure and reset idle speed in accordance with Specification Chart. If carburetor is equipped with solenoid wire at bullet connector, set throttle stopscrew to lower idle speed (see Specification Chart). Hookup solenoid wire to bullet connector and partially open throttle by hand. The end of solenoid plunger should contact the throttle lever and provide an extended position when throttle is released to maintain original higher idle speed setting.

1974 MODELS: AMERICAN MOTORS

Idle Speed & Mixture (Exhaust Analyzer Method)

NOTE: Allow engine to idle not more than 2 minutes at one time. If adjust-

ment requires more time, raise engine speed to the 2000 R.P.M. level for short time to stabilize temperature, then return to idle and carry on with adjustments.

(a.) Hookup exhaust gas analyzer and adjust idle speed to 30 R.P.M. above specified. If solenoid equipped adjust to 30 R.P.M. above specified with solenoid energized.

(b.) With Auto. Trans. in Neutral and solenoid de-energized. Turn throttle speed screw to obtain 500 R.P.M. then energize solenoid.

(c.) Measure CO level, if not in agreement with car mfg's. specifications, rotate mixture screws in or out 1/16 turn at a time to acquire correct CO level at specified R.P.M.

NOTE: For purposes of meter stabilization, allow 10 seconds between each adjustment.

(d.) If during adjustments idle speed varies more than 30 R.P.M., reset to specified R.P.M. adjustments must be repeated until correct CO level is obtained at the specified idle R.P.M.

Idle Speed & Mixture (Tachometer Speed Drop Method)

(a.) Connect tachometer to engine and rotate idle mixture screws to full rich stop, then remove limiter caps.

(b.) With solenoid energized, adjust same to obtain 30 R.P.M. above specified idle R.P.M.

(c.) De-energize solenoid and position Auto. Trans. in Neutral. Rotate throttle speed screw to acquire 500 R.P.M., then energize solenoid.

(d.) Next, rotate mixture screws clockwise (lean) until drop in R.P.M. is obtained. Rotate mixture screws counterclockwise (rich) until highest R.P.M. is indicated with "lean best idle" setting.

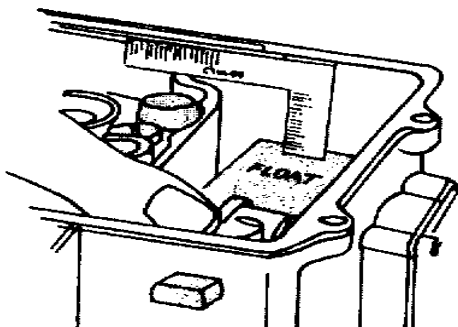
NOTE: During mixture adjustment if speed changes more than 30 R.P.M. repeat adjustment by resetting idle speed to 30 R.P.M. above specified idle R.P.M. However, if "lean best idle" has been obtained (within specified idle R.P.M. range), rotate mixture screws clockwise (lean) until specified idle drop takes place (Auto. Trans. 20 R.P.M.; Man. Trans. 35 R.P.M.).

FAST IDLE - AMERICAN MOTORS

Start engine, run to operating temperature. Set fast idle speed by positioning fast idle screw against index mark (second) step of fast idle cam. Set to correct R.P.M. (see Specification Chart) by adjusting fast idle screw.

ADJUSTMENTS AFTER ASSEMBLY

FLOAT ADJUSTMENTS



DRY FLOAT LEVEL ADJUSTMENT

DRY FLOAT LEVEL—NOTE: This adjustment to be used as a guide only. Final adjustment (Wet Setting) to be checked after carburetor is mounted on engine.

Remove air horn (4) and carefully depress float tab to seat fuel inlet needle slightly without compressing synthetic rubber tip. NOTE: A false reading will result if tip is compressed, however, it will recover slowly to its original shape. Cut gauge to required size (See Specification Chart) at short end allow for the zero line graduation and locate at 1/8" from free end of float. Measure distance as shown from parting surface of main body (gasket removed) to surface of float. If adjustment is required bend tab on float arm to change setting.

WET FLOAT LEVEL—Install carburetor on engine and run at idle speed for at least 3 minutes to equalize fuel level in bowl, then remove air horn and gasket. With engine running, measure from top of main body to top of fuel level 1/4" away from edge of fuel bowl wall. See Specification Chart for correct setting. If adjustment is required, stop engine and bend float tab as needed to alter setting. **WARNING:** Observe precautionary measures when encountering fuel overflow due to potential fire hazard. After adjustment is completed, install air horn with gasket and perform other adjustments as needed at this time.

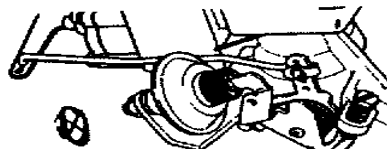
IDLING ADJUSTMENTS



FAST IDLE SPEED SCREW
Make sure cam is clear, then screw in just to reach cam. Adjust screw for correct idle speed (See Specification Chart).

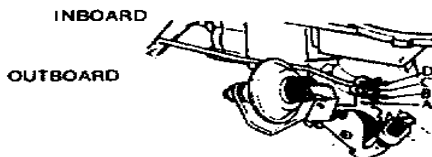


MIXTURE SCREW
Both screws must be seated lightly, turn screw out (American Motors) 2 turns.



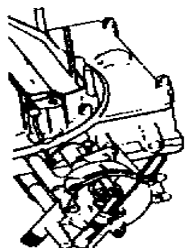
IDLE SPEED
Throttle must be fully closed with screw just touching; then screw in approximately 1 1/2 turns.

ACCELERATOR PUMP ADJUSTMENT (See Specification Chart)



*Pump rod should be placed in holes "B" or "C" for moderate temperature conditions; during winter use hole "D" and in very hot temperature use hole "A" or as specified.

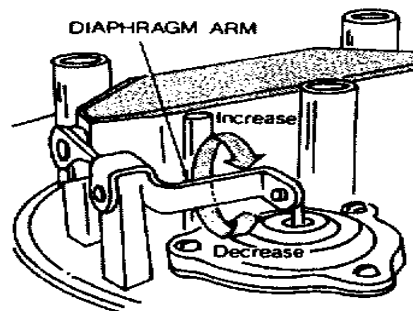
CHOKE ADJUSTMENTS



**INITIAL CHOKE VALVE CLEARANCE
(CHOKE VALVE PULL-DOWN)**

1968-69 MODELS:

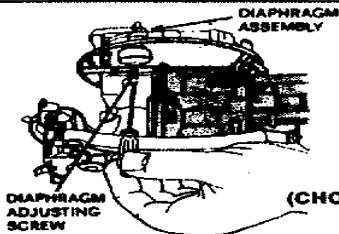
Take a wire about .036 gauge (paper clip will do) bend it at 90° angle about an 1/8 from end, place it in cylinder slot & rotate lever backwards until piston is against gauge. Rotate choke cap at 90° rich. To obtain proper clearance place drill bit as shown. (Refer to Specification Chart for specific size.)



**INITIAL CHOKE VALVE CLEARANCE—AMC
(CHOKE VALVE PULL-DOWN)**

Detach choke shield. Loosen screws and rotate choke cover 90° Rich, retighten screws. Disconnect and remove heat riser tube. Position fast idle screw with index mark on cam. Energize engine without moving throttle linkage. Turn out fast idle cam screw 3 turns. The measured clearance between wall of airhorn and lower edge of choke valve must be as specified (See Specification Chart). To adjust, grasp diaphragm arm securely with pliers and twist arm with second pair of pliers. To increase clearance, twist toward front of carburetor. To decrease clearance, twist toward rear of carburetor. After completing adjustment, stop engine, reconnect heat riser tube. Turn in fast idle cam screw 3 turns. Wait until fast idle cam linkage setting is completed before resetting choke cover.

CAUTION: When bending diaphragm connecting arm, avoid damaging nylon piston rod of diaphragm assembly.



**INITIAL CHOKE VALVE
CLEARANCE—FORD
(CHOKE VALVE PULL-DOWN)**

Diaphragm Type

Loosen screws and rotate choke cover 90° Rich, tighten screws to hold setting. Allow choke to close by opening throttle valve. Push down on choke diaphragm arm until diaphragm reaches end of travel. Next, measure clearance between airhorn wall and lower side of choke valve. Clearance must be as specified (See Specification Chart). Adjust by turning diaphragm adjusting screw clockwise or counterclockwise to decrease or increase clearance respectively.

NOTE: Do not reset auto choke until fast idle cam adjustment has been made.

SPECIFICATION CHART

Carburetor Nos. and Tag Numbers	Dry Float Level	Wet Float Level	Accel. Pump Adj. ¹	Initial Choke Valve Clearance	Fast Idle Cam Adj.	Un-loader	Automatic Choke Setting	Mile R.P.M.	
								Slow	Fast
0DA2 3197582	3/8	13/16	C 1/4	19/64	11/64	13/64	2 rich	600 ¹⁰	1600+
0DM2 3197593	3/8	13/16	C 1/4	17/64	11/64	13/64	Index	650 ¹⁰	1600+
0RA2 3197617	3/8	13/16	C 1/4	11/32	11/64	13/64	1 rich	600 ¹⁰	1600+
1DA2 3211104	3/8	13/16	C 1/4	3/16	11/64	13/64	2 rich	650	1600*
1DM2 3211105	3/8	13/16	C 1/4	3/16	11/64	13/64	1 rich	750/500	1600*
1RA2 3211108	3/8	13/16	C 1/4	3/16	11/64	13/64	2 rich	850/500	1600*
2DA2 3213505	3/8	3/4	C 1/4	1/8	7/64	13/64	2 rich	650	1600
2DM2 3214464	3/8	3/4	C 1/4	9/64	1/8	13/64	1 rich	750	1600
2RA2 8121335	3/8	3/4	C 1/4	1/8	7/64	13/64	2 rich	700	1600
8HA2 3191867	3/8	3/4	C 1/4	9/64	7/64	5/64	Index	550 ¹¹	1600
8HM2 4486223	3/8	3/4	C 1/4	1/8	7/64	5/64	Index	850 ¹¹	1600
8ZA2 4486225	3/8	3/4	C 1/4	9/64	7/64	5/64	Index	550 ¹¹	1600
9HA2 3194506	1/2	13/16	C 1/4	9/64	7/64	5/64	Index	550 ¹²	1600+
9HM2 3194505	1/2	13/16	C 1/4	1/8	7/64	5/64	Index	850 ¹²	1600+
9ZA2 3194509	1/2	13/16	C 1/4	9/64	7/64	5/64	Index	500 ¹²	1600+
3DA2 3218383	3/8	3/4	C 1/4	7/64	7/64	1/4	2 rich ¹³	700	1600
3DM2 3218382	3/8	3/4	C 1/4	1/8	7/64	1/4	1 rich ¹³	750	1600
3RA2 3218384	3/8	3/4	C 1/4	7/64	7/64	1/4	2 rich ¹³	700	1600
3RH2 5351418	—	—	—	—	—	—	—	{ 700(A) }	—
4RH2 5352308	3/8	3/4	—	9/64	1/8	—	2 rich	{ 750(S) }	1600
4DA2 3222316	13/32	25/32	—	9/64	1/8	1/4	1 rich	700/800	1600
4DA2E 3222319	13/32	25/32	—	9/64	1/8	1/4	1 rich	700/800	1600
4DM2 3222317	13/32	25/32	—	9/64	1/8	1/4	1 rich	700/800	1600
4DMJ2 5352310	13/32	25/32	—	9/64	1/8	—	1 rich	700/800	1600
4RA2 3222320	13/32	25/32	—	9/64	1/8	1/4	1 rich	700/800	1600
5DA2 —	13/32	3/4	C 1/4	9/64	1/8	1/4	1 rich	"	1600
5DM2 —	13/32	25/32	C 1/4	1/8	1/8	1/4	2 rich	"	1600
5DM2J —	13/32	25/32	C 1/4	1/8	1/8	1/4	2 rich	750	1600
5RA2 —	13/32	3/4	C 1/4	9/64	1/8	1/4	1 rich	"	1600
5RHA2 5354499	35/64	15/16	C 1/4	9/64	1/8	1/4	2 rich	700	1600
5RHM2 5353843	35/64	15/16	C 1/4	9/64	1/8	1/4	2 rich	750	1600

FOOTNOTES

- ¹See Accel. pump adjustment (pg. 2)
- + Position fast idle screw opposite index mark of cam.
- *Auto. Transmission in Drive. Fast idle screw opposite index mark on cam.
- **Auto. Transmission in Drive.
- **Auto. Transmission in Drive, headlights & Air Conditioning on.

- **Air Conditioning OFF.
- **Un-loader setting 1/4.
- **See Engine Compartment Tune-Up Decal.
- A... Automatic Transmission
- S... Standard Transmission
- IN... Inboard hole, with pump rod in.