FUEL SYSTEM
SERVICE INSTRUCTION WORKSHEET

GF3625-1

TO REPAIR FORD CARBURETOR
MODEL 1250 (BELFAST)—1 Barrel

PARTS LIST

1	Retainer Clip
2	Fast Idle Cam Rod
3	Link Bushing
4	Fast Idle Cam Shoulder Screw
5	Fast Idle Cam
6	Choke Cover Screw (3)
7	Choke Cover & Thermostat Spring Assy.
8	Choke Cover Gasket
9	Choke Housing Screws (2)
10	Choke Housing Gasket
11	Choke Housing
12	Piston Shaft Outer Lever Screw (1)
13	Choke Link & Rod Lever
14	Retainer Clip
15	Choke Shaft Lever Connecting Link
16	Piston Shaft Inner Screw (1)
17	Choke Thermostat Selector Arm
18	Choke Piston Lever
19	Choke Piston Actuating Shaft & Bushing
20	Choke Piston Connecting Link
21	Choke Piston
22	Air Horn Assy. Attaching Screws (6)
23	Air Horn Assy.
24	Air Horn to Main Body Gasket
25	Float Pivot Pin
26	Float
27	Fuel Inlet Needle
28	Fuel Inlet Seat
29	Fuel Inlet Seat Gasket
30	Fuel Inlet Screen
31	Main Metering Jet
32	Main Body Assy.
33	Accelerator Pump Ball Weight
34	Accelerator Pump Ball
35	Accelerator Pump Cover Screws (4)
36	Accelerator Pump Cover
37	Pump Lever Pin
38	Pump Lever
39	Pump Diaphragm
40	Pump Diaphragm Return Spring
41	Pump Check Valve Washer
42	Pump Check Valve Spring
43	Overtravel Pump Spring
44	Pump Spring Stop Washer
45	Accelerator Pump Control Rod
46	Pump Lever Screw (1)
47	Throttle Shaft Pump Lever
48	Idle Mixture Screw
49	Idle Mixture Screw Spring
50	Idle Speed Screw
51	Idle Speed Screw Spring
52	Throttle Lever 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 below and are identified in numerical sequence 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 this kit.

4. This instruction sheet is applicable to all carburetors of this type. Although minor variations occur between the different models, procedures will be essentially as described and the difference 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.

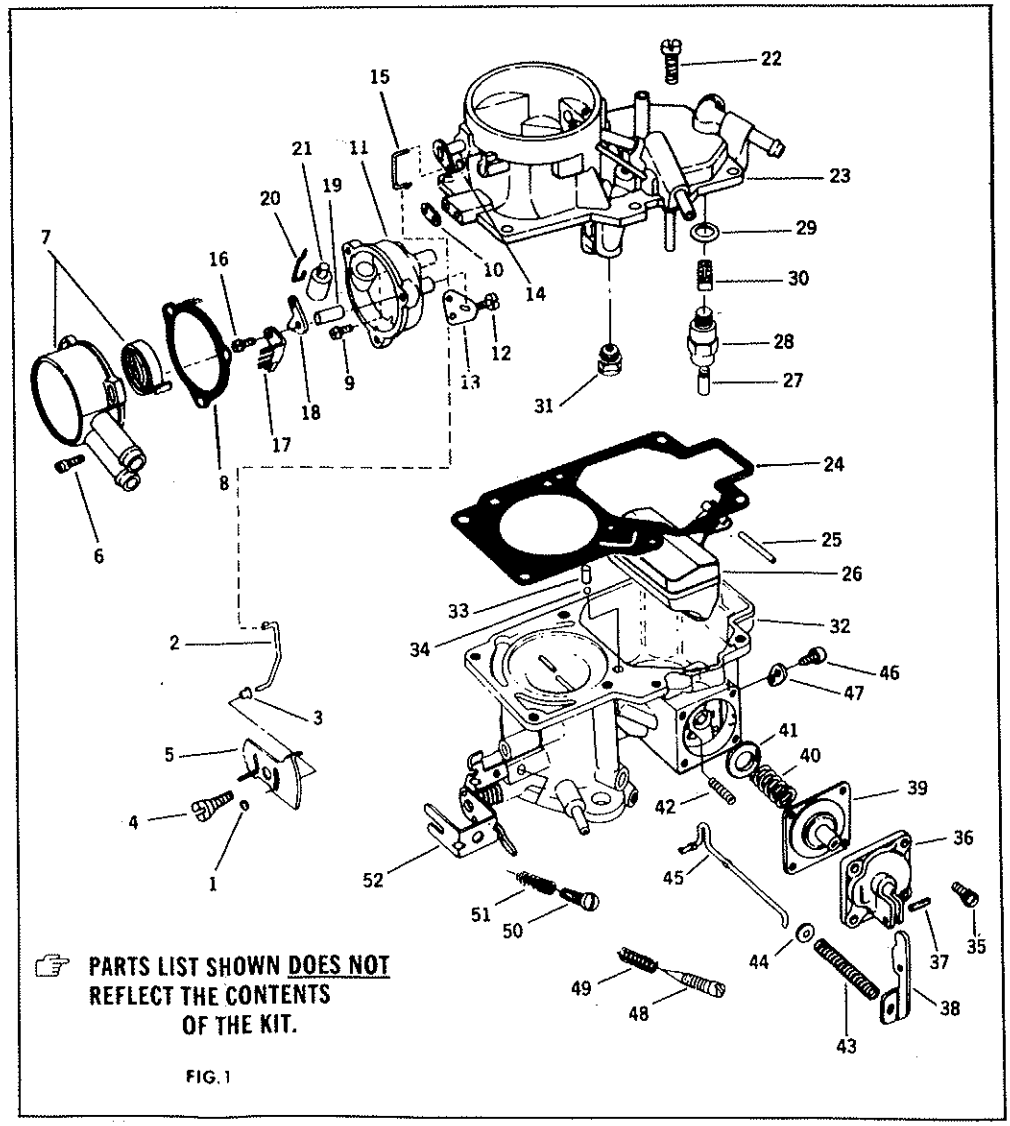

FIG. 1

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I. DISASSEMBLY

Perform the following disassembly procedures as outlined below using the exploded view (Fig. 1) and parts list as a guide. Disassemble only to the extent necessary to permit thorough cleaning and inspection of parts.

1. Pry off retainer clip (1), slide off link bushing (3) and disengage fast idle cam rod (2) from fast idle cam (5) and link rod lever (13). Remove shoulder screw (4) and lift off fast idle cam (5).

2. Before attempting removal of choke assembly, mark position of choke housing (11) with relation to index mark on top of choke cover (7). Dismantle choke assembly as follows:

(a) Remove screws (6) and slowly lift off cover and thermostat spring assembly (7), simultaneously disengage hooked end of spring from choke thermostat selector arm slot (17). Be sure to note location of slot from which hooked end of spring was removed.

(b) Peel off choke cover gasket (8) and retain for matching purposes.

(c) Partially disconnect choke housing (11) by removing screws (9). Peel off gasket (10) from air horn assembly (23) and retain for matching purposes. Note position of choke link and rod lever (13) then remove by withdrawing outer lever screw (12). Pry off retainer clip (14) then disengage choke shaft lever connecting link (15) allowing choke housing (11) to separate from air horn assembly (23).

(d) Remove piston shaft inner screw (16), slide off choke piston selector arm (17). Separate choke piston lever (18) from choke piston connecting link (20) and choke piston (21). Carefully slide out choke piston actuating shaft and bushing (19).

NOTE: Mark positions of both choke piston selector arm (17) and choke piston lever (18) also note hole locations for choke piston connection link (20).

3. Carefully separate air horn assembly (23) and gasket (24) as a unit from main body assembly (32) by removing screws (22).

NOTE: Gasket (24) should adhere to air horn assembly (23) and not to main body assembly (32).

4. Place air horn assembly (23) on a flat surface in an inverted position. Carefully drive out float pivot pin (25) and remove float (26).

5. With hand cupped and placed on bottom of air horn assembly (23), change position to right side up permitting fuel inlet needle (27) to fall into cupped hand. Again invert and remove fuel inlet seat (28) and screen (30) along with gasket (29) and main metering jet (31).

NOTE: Clean fuel inlet screen (30) if dirty.

6. Retrieve pump ball weight (33) and pump ball (34) by inverting main body assembly (32).

NOTE: Exercise care in handling main body assembly (32), particularly when changing to an inverted position. Loose remaining parts are subject to fall out with possible loss and damage.

7. Dismantle accelerator pump diaphragm assembly as follows: Remove cover screws (35) and pump cover (36). Drive out lever pin (37) and remove pump lever (38) only if replacement is required. Remove pump diaphragm (39) from pump cover (36). Withdraw return spring (40), check valve washer (41) and check valve spring (42) from accelerator pump housing.

8. The following items are to be dismantled only if replacement is required: Overtravel pump spring (43), stop washer (44), pump control rod (45), pump lever screw (46), pump lever (47), idle mixture screw (48), spring (49), idle speed screw (50), spring (51) and throttle lever assembly (52).

NOTE: Mark positions of pump lever (47), idle mixture screw (48) and idle speed screw (50) before removal to permit re-assembly to original settings.

II. CLEANING & INSPECTION

Follow cleaning instructions as outlined on the front page of this instruction sheet. Inspect all castings for damaged or burred mating surfaces, cracks, warpage and stripped screw thread holes. Badly damaged screws must be replaced. New screws (considered as general hardware) are available at most hardware supply dealers. Check throttle valve and choke shafts for looseness or binding. Replace all parts with applicable new items found in kit.

III. RE-ASSEMBLY

Reverse the numerical sequence to re-assemble carburetor using reference numbers as a guide. Also refer to index call out numbers for proper location and position of parts as shown in Exploded View (Fig. 1).

NOTE following instructions:

1. When replacing pump diaphragm return spring (40) be sure to face small end of spring toward accelerator pump housing of main body assembly (32).

2. Secure plain end of choke link (15) with retainer clip (14) and install choke housing assembly so as to align slot of previously installed choke link and rod lever (13) with swagged end of choke link.

3. When replacing thermostat cover and spring assembly (7), be sure to engage hooked end of thermostat spring with center slot of choke thermostat selector arm (17).

IV. ADJUSTMENT PROCEDURES

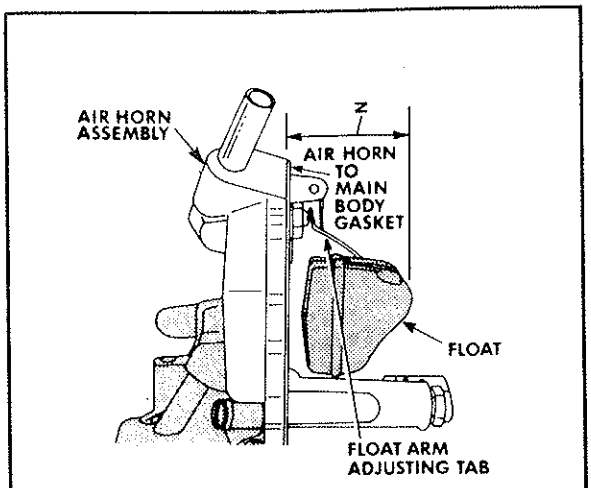


FIG. 2 FLOAT LEVEL

FLOAT LEVEL (Fig. 2)

Remove air horn assembly and hold in vertical plane with float suspended in a downward position. Measure distance Z as shown in illustration and refer to specification chart for correct dimension. To adjust, bend float arm adjusting tab to required setting.

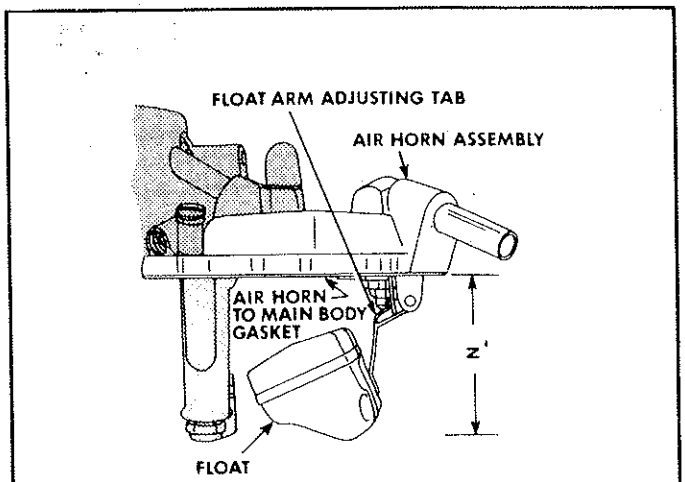


FIG. 3 FLOAT DROP

FLOAT DROP (Fig. 3)

With air horn assembly removed and held in a horizontal positon, measure distance Z' as shown in illustration. Refer to specification chart for correct clearance. To adjust, bend float arm adjusting tab to obtain proper clearance.

CHOKE VALVE PULL-DOWN SETTING (Fig. 4)

Remove choke cover and thermostat spring assembly (Fig. 1, 7). Open choke valve and place .031" wire gauge on top of slot in choke piston cylinder (See Fig. 4). Raise piston to hold wire in this position then rotate choke valve toward closed position until its motion is limited by linkage. Measure clearance between lower edge of choke valve and wall of air horn assembly (Fig. 1, 23) using correct gauge (see specification chart). Adjust by bending extension lip of choke thermostat selector arm (17).

FAST IDLE CAM LINKAGE SETTING

With choke valve pull-down setting completed and held in pull-down position, the fast idle tab on the throttle lever assembly (Fig. 1, 52) must be in high speed step (first step) of cam ("V" mark on fast idle cam). Index mark on fast idle cam at this point should align with fast idle adjusting screw. To adjust, bend fast idle cam rod (See Fig. 6) until desired setting is obtained.

FIG. 4 CHOKE VALVE PULL-DOWN SETTING

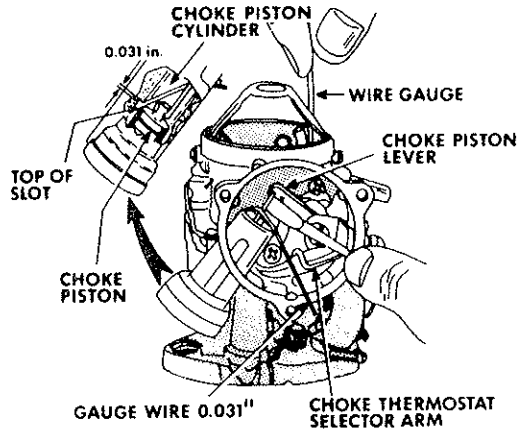
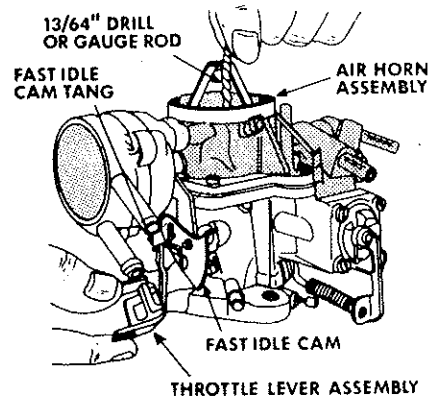


FIG. 5 CHOKE UNLOADER SETTING



CHOKE UNLOADER SETTING (Fig. 5)

Move throttle lever to wide open position and close choke valve using light hand pressure. Insert gauge and measure clearance (see specification chart) between bottom of choke valve and wall of air horn assembly. If adjustment is required, bend tang on fast idle cam until desired setting is obtained.

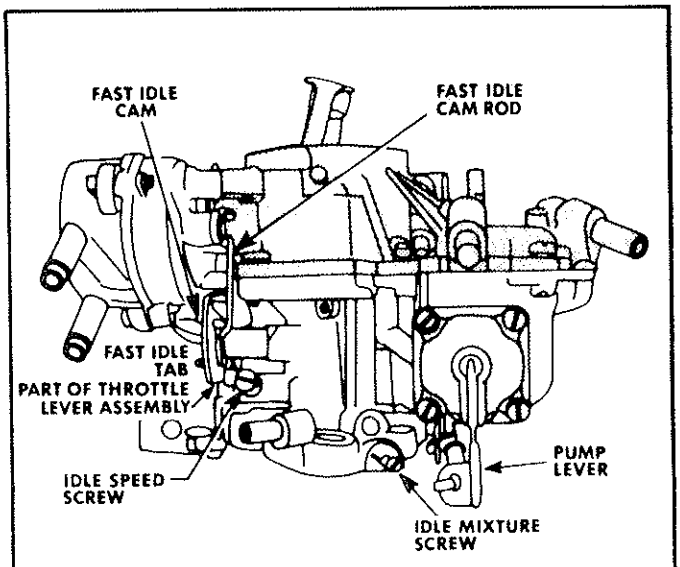


FIG. 6 IDLE RPM—MIXTURE—FAST IDLE

IDLE RPM—MIXTURE—FAST IDLE (Fig. 6)

Idle RPM—With transmission in neutral and engine at normal operating temperature, adjust throttle to specified RPM (see specification chart) by loosening jamb nut and moving solenoid in or out. Disconnect solenoid wire at bullet connector (solenoid de-energized) and set curb idle speed screw to specified low idle RPM. Hook-up solenoid wire (solenoid energized) and crack throttle valve open slightly to permit solenoid plunger rod to extend, increasing idle speed to higher RPM (see specification chart).

Idle Mixture—Adjust idle mixture screw within range of limiter cap to obtain smoothest possible idle. If smooth idle cannot be obtained within normal limits, it is advisable to check other engine conditions before attempting removal of limiter cap. Where Air Pollution Control Regulations prevail, idle mixture adjustments must be performed with the aid of an Exhaust Gas Analyzer, following procedures as outlined in car shop manual.

Fast Idle Speed (PINTO)—Be sure that choke pull-down and fast idle cam linkage settings have been made before adjusting fast idle speed.

With engine at normal operating temperature, set fast idle tab (part of throttle lever) on kick down step of fast idle cam. If adjustment is required, bend fast idle tab accordingly to obtain specified RPM (see specification chart).

AUTOMATIC CHOKE POSITION

Loosen choke cover screws (Fig. 1, 6) retaining choke cover and thermostat housing spring assembly (7) to choke housing (11). Rotate and align index mark on top of choke cover (7) with appropriate mark (see specification chart) on top of choke housing (11). Tighten choke cover screws (6).

SPECIFICATION CHART

Carburetor Number	Float Level	Float Drop	Accel. Pump Setting	Choke Pull-Down Setting	Auto Choke Position	Unloader Setting	Eng. RPM Idle Speed	
							Hot	Fast
701W-EA	—	—	—	— —	—	—	850/400*	
701W-EB	†	†	†	†	†	†	†	†
711W-AAA	—	—	—	—	—	—	850/400	—
711W-BDA	1-5/32	1-23/64	5/64	1/8	Index	13/64	900/550*	1700
711W-BDB	1-13/64	1-25/64	1/16	5/64	Index	13/64	900/550*	1700
711W-BTA 721F-KEA 721F-KEB	†	†	†	†	†	†	†	†
721F-KFA,KFB	1-13/64	1-13/32	3/64-3/32	1/16-5/64	Index	13/64	900/500#	1700
731F-KAA	1-13/64	1-13/32	3/32	5/64	Index	7/32	‡	1700
731F-LCA	1-13/64	—	27/32	5/64	Index	7/32	900	1700

FOOTNOTES

* With Headlights in OFF position; Higher speed Solenoid activated, Lower speed solenoid de-activated.

† Specification data not available at present.

‡ See manufacturer Car Manual for procedure.

\# Headlights on High Beam. Air Conditioning OFF. Higher RPM - Solenoid energized, Manual Trans. in Neutral. Lower RPM - Solenoid de-energized, Manual Trans. in Neutral.