

CARTER CARBURETOR

SERVICE PROCEDURE

To Disassemble

1. Remove carburetor from engine.
2. Remove bowl nut, gasket and bowl.
3. Remove float pin, float, needle and needle seat. Check float for dents, leaks, and wear on float lip or in float pin holes.
4. Remove bowl ring gasket.
5. Remove low speed jet and high speed adjusting needle assembly and spring.
6. Remove idle adjustment screw and spring.
7. Remove nozzle.
8. Remove throttle valve screws, valve, and shaft and lever assembly.
9. Do not remove choke valve and shaft unless replacement of these parts is necessary. A spring loaded ball retains choke in wide open position. Be sure to use a new ball and spring when replacing choke shaft and lever assembly. CAUTION: Hold a screw driver handle or a small piece of wood over threaded hole in air horn (side opposite choke lever) to prevent the ball from flying out when shaft is removed.
10. Clean all parts in clean solvent, making sure all carbon accumulation is removed from bore, especially where throttle valve seats in casting. Blow out all passages with compressed air. Replace all worn and damaged parts. Always use new gaskets.

To Assemble

11. Install throttle shaft and valve. Valve must be installed with trademark "c" on side toward idle port when viewing from flange side. Always use new screws. With valve screws loose and throttle lever set screw backed out, seat valve by tapping lightly with a small screw driver. Hold in place while tightening screws.
12. Install nozzle, making sure it seats in casting.
13. Install needle seat, needle, float and float pin.
14. Set float level. With carburetor casting inverted, float resting lightly against needle in its seat, there should be 11/64" clearance between outer edge of casting and free end of float (side opposite needle seat). Adjust by bending lip of float with small screw driver.
15. Install bowl ring gasket, bowl, bowl nut gasket and bowl nut. Tighten securely after making sure bowl is centered in gasket.
16. Install low speed jet and high speed needle assembly. Turn in until it seats in nozzle, then back out 1 turn.
17. Then install idle adjusting screw, finger tight. Back out approximately 1 1/2 turns. DO NOT USE PLIERS OR SCREW DRIVER AS IT MAY DAMAGE IDLE SCREW.

HIGH SPEED AND IDLE SCREW ADJUSTMENT

After rebuilding and installation on engine is complete the high speed and idle screw adjustments must be made. With the high speed needle turned counter clockwise (from closed position 1 turn and idle screw turned 1 1/2 turns open, start engine.

With the engine at normal operating temperature, accelerate engine and check response. The high speed needle should be adjusted for the leanest possible mixture which will allow satisfactory acceleration and steady governor operation. If the engine misses and backfires, the high speed mixture is too lean and high speed adjustment screw must be turned

counter clockwise 1/8 turn at a time to correct this condition. If the engine loads (heavy exhaust and is sluggish, the mixture is too rich and the high speed adjustment screw must be turned clockwise 1/8 turn at a time to correct. To make final check of the high speed adjustment, operate the engine under load and adjust.

The idle screw should be adjusted intermittently while making the high speed adjustment. DO NOT USE FORCE ON THE HIGH SPEED NEEDLE OR IDLE SCREW AS DAMAGE MAY RESULT.

CARBURETOR SPECIFICATIONS

DIMENSIONS:

FLOAT LEVEL:

VENT:

GASOLINE INTAKE:

LOW SPEED JET TUBE:

IDLE PORT:

IDLE PORT OPENING:

IDLE SCREW SEAT:

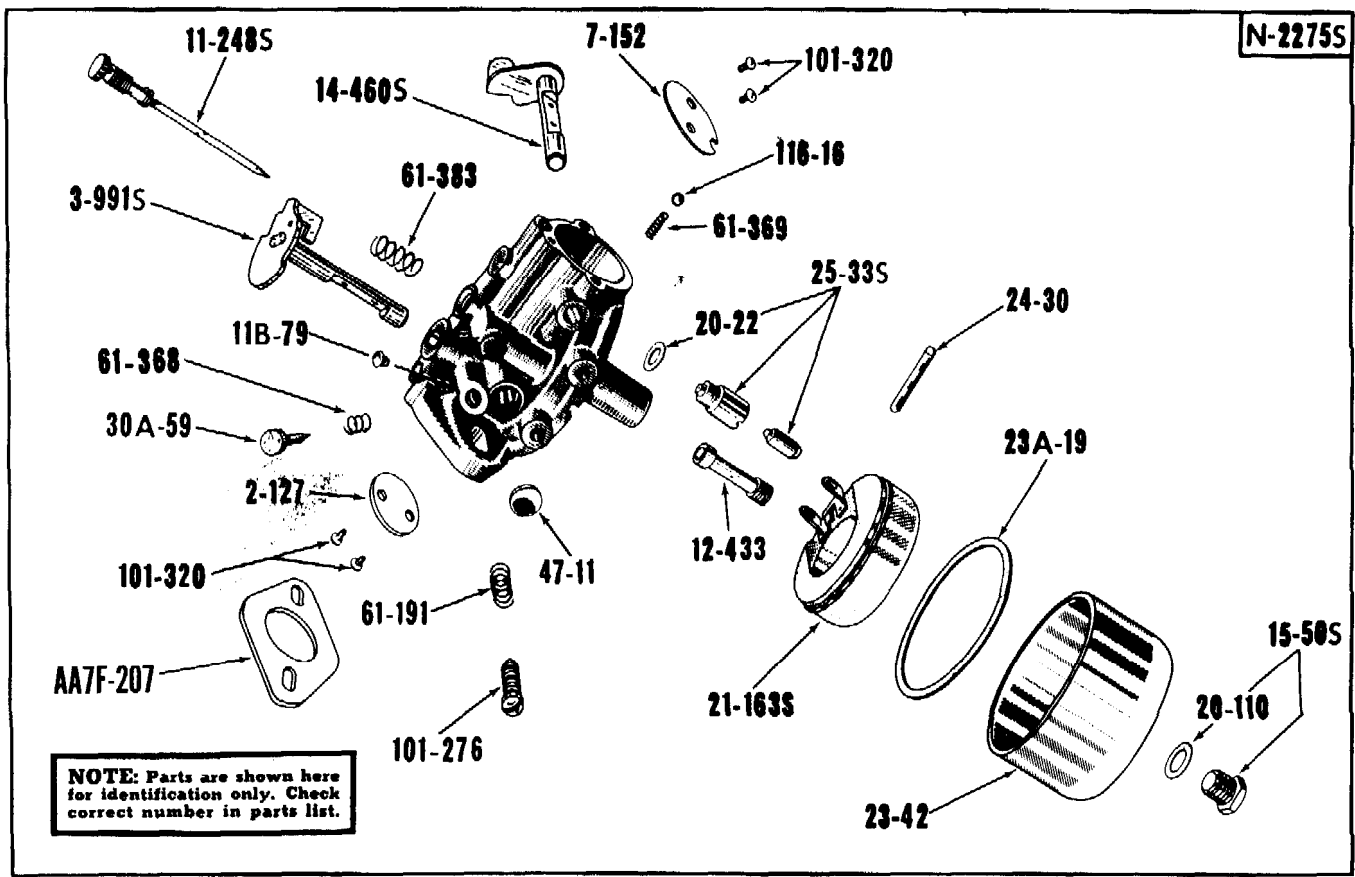
SET IDLE ADJUSTMENT SCREW:

MAIN NOZZLE:

HIGH SPEED ADJUSTING NEEDLE:

CHOKE:

- Flange size 1/2 inch S.A.E. (Slotted). Main venturi size, 1/2 inch.
- Distance from top of float (at free end) opposite needle seat to outer edge of float chamber cover when needle is seated to be 11/64 inch, plus or minus 1/64 inch.
- Inside, size No. 20 (.161 inch) drill.
- Size No. 48 (.076 inch) drill.
- Jet, size No. 75 (.021 inch) drill. Auxiliary jets (Idle Bleed) in side of tube, 4 - size No. 70 (.028 inch) drill.
- Round type, size .039 to .042 inch diameter.
- Top of port to be .025 to .029 inch above top edge of valve with valve tightly closed.
- Size .051 inch diameter.
- 1/4 to 2 3/4 turns open. For richer mixture turn screw out. Do not idle engine below 1400-1800 r.p.m.
- Accelerating jets (in side of nozzle) 4 - size No. 62 (.038 inch) drill. Nozzle passage (nozzle well to air horn) size No. 32 (.116 inch) drill.
- Seat (in base of nozzle), size .0595 inch diameter. Setting, see adjustments.
- Manual - butterfly type.



AA7FA-4130 CARBURETOR ASSY.

Part No.	Part Name	List Price	Part No.	Part Name	List Price
AA7F-207	Flange gasket		23A-19	Bowl ring gasket	
2-127	Throttle valve		24-30	Float lever pin	
3-991S	Throttle shaft and lever assembly		25-33S	Needle and seat assembly	
7-152	Choke valve		30A-59	Idle adjustment screw	
11-248S	Idle jet and high speed adjusting needle ass'y.		47-11	Welsh plug	
11B-79	Rivet plug		61-191	Throttle lever adjusting screw spring	
12-433	Nozzle		61-368	Idle adjustment screw spring	
14-460S	Choke shaft and lever assembly		61-369	Choke shaft spring	
15-50S	Bowl nut assembly		61-383	High speed adjusting screw spring	
20-22	Needle seat gasket		101-276	Throttle lever adjusting screw	
20-110	Bowl nut gasket		101-320	Choke and throttle valve attaching screw (4)	
21-163S	Float and lever assembly		116-16	Choke shaft ball	
23-42	Bowl				

NOT SHOWN ON ILLUSTRATION

- AA7FA-410 Manifold - Intake
- AA7S-365 Rod - Governor to Carburetor
- AA7FA-4110 Air Cleaner Assy.
 - Includes (1) AA7F-387 Elbow
 - (1) AA7FA-226 Body (Plastic)
 - (1) AA7FA-2210 Filter Case Assy.
 - (1) AA7FA-222 "O" Ring
 - (1) AA7F-4740 Bolt & Wing Nut Assy.