

**Carter YS950S Carburetor Specifications (Carter Carburetor Form 4960B released March 1953, revised March 1956.)**  
**For Willys 4 Cylinder Engine: 3 1/8 Inch Bore, 4 3/8 Inch Stroke**

Dimensions:

Flange size, ----- 1 1/4 inch S. A. E.  
Primary venturi, ----- 11/32 inch I. D.  
Secondary venturi, ----- 19/32 inch I. D.  
Main venturi, ----- 1 1/4 inch I. D.

Float Setting:

Distance from seam of float to float chamber  
over, with weight of float on needle and spring: ----- 9/64 inch.

Vents:

Balanced thru air horn to air cleaner via tubing external to carburetor.  
Vent: Bowl chamber to carburetor bore, size ----- No. 68 (.031 inch) drill.

Gasoline Intake:

Square vertical (spring loaded) needle ----- No.53 (.0595 inch) drill size in needle seat.  
Bleeder tube, assembled over idle tube, with 2 side holes----- No. 65 (.035 inch) drill.

Low Speed Jet Tube:

Jet size, ----- No. 70 (.028 inch) drill (in end  
of tube).  
Auxiliary jet (on side of tube) size: ----- No. 75 (.021inch) drill.  
By-pass (in air horn) size: ----- No. 52 (.0635 inch) drill.  
Economizer (in body) size: No. 54 (.055 inch) drill.

Idle Port:

Upper port: slot type, length, ----- .165 inch.  
Width, ----- .030 inch.

Idle Port Opening:

Top of port----- 125 to .129 inch above top edge of valve with valve  
tightly closed.

Lower Port (For Idle Adjustment Screw): Size, ----- .053 to .057 inch diameter.

Set Idle Adjustment Screw: ----- 1/2 to 1 1/2 turns open. For richer  
mixture, turn screw out.

Idle engine at ----- 700 R.P.M. with deep fording vents open.

Main Nozzle:

In primary venturi, ----- angle 20°.  
Discharge jet size, ----- .0935 inch inside diameter.  
Main nozzle bleed (tube in air horn) ----- Size: No. 70 drill.

Metering Rod (Diaphragm operated):

Economy step, ----- .070 inch.  
Power Step ----- 054 inch diameter.  
Vacuum passage restriction, size: ----- No. 50 (.070 inch) drill  
Vacuum passage bleed to bore, size: ----- No. 65 (.035 inch) drill.  
Metering Rod Jet: Size: ----- 096 inch diameter.

Accelerating Pump: Diaphragm type, vacuum operated.

Discharge jet size, ----- No. 72 drill.  
Intake ball check size: ----- No. 40 drill.  
Discharge ball check under needle, size ----- No. 50 drill.  
Vacuum passage restriction, in flange size: ----- No. 52 (.0635 inch) drill.  
Vacuum passage air bleed to bore, size: ----- No. 62 (.038 inch) drill.

Pump Stroke: ----- No adjustment.

Choke: Manual--Offset, butterfly type with poppet valve

Vacuum Spark Port: ----- None.