

INSTALLING INSTRUCTIONS

Carburetor Overhaul Packages
(387 455 R92, 387 456 R92,
387 457 R92, and 387 459 R92)

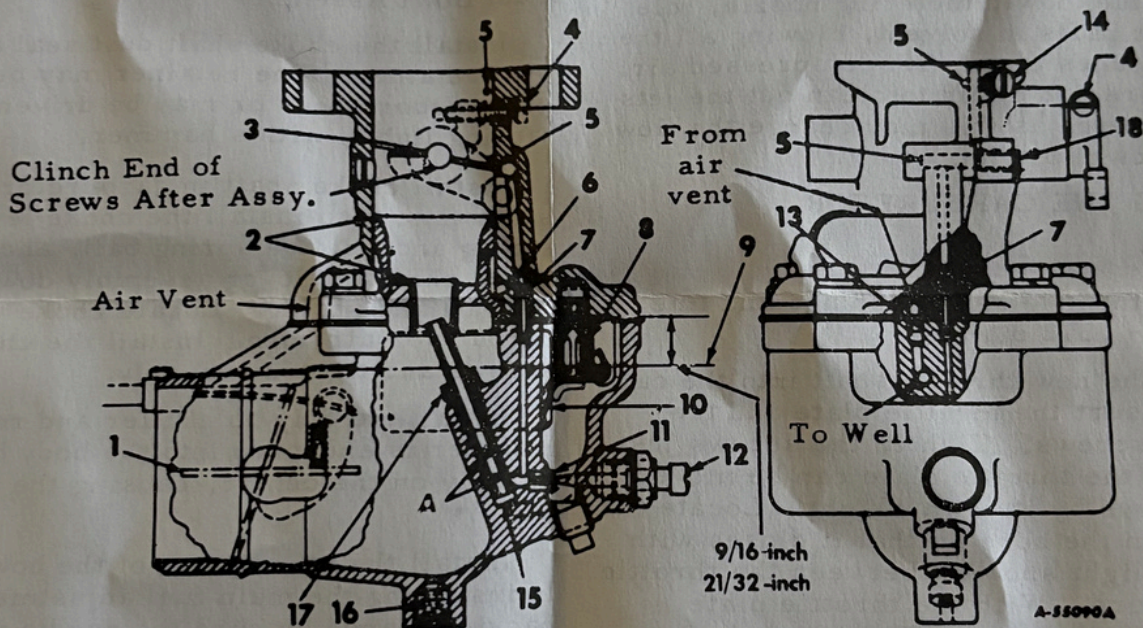
for

IH 1-1/4" and 1-3/8" Updraft Carburetors

These packages include the following parts usually replaced when overhauling the carburetor.

Dust seal retainer
Float and lever assembly
Float lever pivot
Float needle valve cage assembly
Friction spring ball
Fuel adjusting screw
Idle adjusting needle screw
Idle adjusting needle screw retainer spring
Throttle stop screw retainer spring

Idle throttle stop screw No. 10-32 x
7/8-inch fillister head
Choke lever friction spring
Choke stop pin
Strainer screen retainer assembly
Throttle plate screw (2)
Throttle shaft assembly
Throttle shaft bushing (2)
Throttle shaft expansion plug



Illust. 1.

Cross section of a typical carburetor with identification of the principal parts.

- | | | |
|------------------------|-------------------------------|---------------------------------|
| 1. Choke valve | 7. Idle jet | 13. Well air bleed |
| 2. Venturi | 8. Needle valve and seat | 14. Idle adjusting needle screw |
| 3. Throttle plate | 9. Liquid level | 15. Metering well |
| 4. Throttle stop screw | 10. Float assembly | 16. Drip hole filler |
| 5. Idle ports | 11. Main metering jet | 17. Discharge nozzle |
| 6. Idle air bleed | 12. Main jet adjustment screw | 18. Idle passage plug |

"A" Bleed holes in discharge nozzle

Throttle Body

The following procedure should be used in repairing the carburetor:

Remove the fuel line fitting and screen retainer.

Remove the four assembly screws.

Separate the two halves of the carburetor, being careful to pull straight up on the throttle body with a slight oscillating motion only, to prevent damaging the float mechanism.

"The Zenith carburetor you have purchased is the UPDRAFT type, mounted to an intake manifold above the carburetor. Gasoline accumulates in the intake manifold (condensation) and up to 1/4 cup of fuel will drain back into the carburetor. For this purpose, there is a drain in the bottom of the fuel bowl. Do not misinterpret fuel dripping from the air horn/intake as flooding or leaking."

Remove the float lever pivot, the float, and float valve cage assembly.

Remove the screws from the throttle shaft and remove the throttle plate, being careful not to damage the edges. Remove the throttle shaft bushings and plug.

Remove the idle adjusting needle screw and needle screw retainer spring. Remove the idle passage plug.

Clean the upper body in a good commercial gum solvent and blow out with compressed air. The venturi should be cleaned at this time also.

Fuel Bowl

Remove the idle metering jet, metering nozzle, fuel adjusting screw, and fuel adjusting screw packing nut, packing, and drain plug from the fuel bowl. Remove the choke valve screws and remove the choke valve and shaft. Pry out the dust seal and the dust seal retainer from the choke shaft boss and the drip hole plug and drip hole filler.

Clean the fuel bowl, metering nozzle, idle jet, and other parts in solvent, blowing all the fuel bowl passages clean with compressed air. Do not use wires or drills to clean out the jets or main air bleed, as this may change the flow characteristics of the jet.

ASSEMBLING THE CARBURETOR

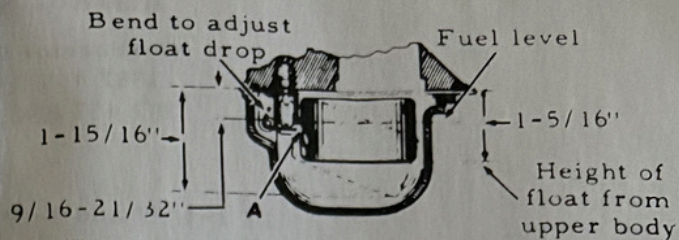
Throttle Body

Install the throttle shaft bushings and line ream to .314 - .312 diameter.

Assemble the new throttle shaft into the carburetor and insert the throttle plate and the throttle shaft screws. Tighten the screws just enough so that the throttle plate can be moved but will not move by its own weight. Locate the throttle plate in the bore so that it closes with a minimum of light showing between the throttle plate and the bore. With the throttle plate closed, tighten the screws. Check the shaft to see that it is free, but does not have excessive play up and down. Movement should not be more than .005 in. when measured on the end of the shaft. Peen over the end of the screws to prevent loss in use.

Assemble the new float valve cage assembly float assembly, and float lever pivot. Turn the throttle body upside down and measure the distance from the gasket surface on the throttle body to the bottom (now the top of the float). The location of the float can be changed slightly by carefully bending the float lever while holding it with a pair of pliers at the point marked "A". See Illust. 2.

When bending the lever, be sure to apply the pressure to the lever itself and not on the thin wall of the float.



Illust. 2
Float height and fuel level measurements.

Reassemble the complete body, using the new parts provided. Set the idle throttle stop screw to open the throttle plate by turning it in about 1-1/2 turns from the time it contacts the throttle stop.

Using your fingers only, install idle adjusting needle screw with retainer spring. Turn needle screw until it seats, then open 1-1/4 turns.

Fuel Bowl Assembly

Install the choke shaft dust seal and the dust seal retainer. The retainer may be pressed in on an arbor press or may be driven in place by tapping lightly with a hammer.

Install choke shaft in carburetor and at the same time also install the choke lever friction spring and friction spring ball, and bring the choke shaft and lever assembly down to retain the ball and spring. Locate choke valve in the carburetor air horn. Install the choke valve screws and tighten securely.

Install the drip hole filler and retainer. The retainer is anchored into the body by tapping it sharply on the center, causing the side to press out.

Install the other parts of the bowl assembly. In installing the main fuel adjustment needle and packing gland, be sure the needle is not jammed into the seat when tightening up the packing gland. Tighten the packing gland just enough to prevent the needle from turning under vibration, and the fuel from leaking. NOTE: DO NOT OVERTIGHTEN as the casting may be broken by the excessive pressure of the expanding packing. Bring the needle down to seat and turn out about three turns as a starting point. Final adjustment is to be made in field operation. After the gland has been tightened and the initial adjustment made, observe the end of the needle. Flush out any particles of packing which may have been carried along by the adjustment needle when inserted.

Assemble the two halves of the carburetor together using the new gasket. Check the assembly screws and retighten them after the carburetor has been in use a short while, to take up initial set of gasket.

INTERNATIONAL HARVESTER COMPANY

401 NORTH MICHIGAN AVE.

CHICAGO, ILLINOIS 60611, U.S.A.

Printed in United States of America.