

SERVICE BULLETIN

CAB SERVICE & PARTS CORPORATION

#74

SUBSIDIARY OF
CHECKER MOTORS
CORPORATION

NEW YORK * BROOKLINE
CHICAGO * DETROIT

February 11, 1959

Subject: FUEL SYSTEM

Description: CARBURETOR MAINTENANCE

The idle system of the carburetor has a large effect on gasoline mileage in taxicab service.

A cab idles from 30% to 50% of the time it is on the streets.

Furthermore, the idle system supplies gasoline to the engine up to speeds of about 25 miles per hour.

An over-rich idle mixture can cause a waste of gasoline and poor gas mileage.

There are two ways an over-rich idle mixture can occur:

1. Improper setting of the idle needle: It is important to use the leanest mixture which will give a smooth idle. Turning the needle in gives a leaner mixture; backing it out, causes a richer mixture. Therefore, when adjusting idles, turn the needle in - toward the seat - until the engine becomes slightly rough. Then back off just enough to get a smooth-running engine. If this requires that the needle be set only $\frac{1}{4}$ to $\frac{1}{2}$ turns off the seat, make the adjustment to maintain good gas mileage. If an exhaust gas analyzer is used, a reading between 12 and 13 air-fuel ratio will generally be satisfactory.

2. The idle system becomes clogged: A positive check for this condition is to make an adjustment of the idle needle. If the engine does not respond, proceed as follows:

Shut off the engine and remove the top of the carburetor. Turning the top upside down, observe that there is a small brass bushing which is directly over the idle jet, when the carburetor

continued.....

February 11, 1959

CARBURETOR MAINTENANCE (continued). Page 2

is assembled. This is the idle air bleed. When it becomes clogged, the idle mixture automatically becomes rich and can no longer be adjusted with the idle needle.

Clean this bushing thoroughly, being careful not to damage it or force it out of the air channel. A#54 drill will remove all deposits and, if used carefully, will not damage the bushing. After running the drill through the bushing, wash with solvent or gasoline, and blow out with air.

Check the idle jet, making certain that the small orifice in the side of the jet is clean and free. Reassemble the carburetor.

After starting the engine, adjust the idle as directed above. Make certain that the leanest idle setting which allows for a smooth engine, is used.

It will be generally unnecessary to remove the entire carburetor, unless dirt has accumulated in the bowl or carbon has built up at the throttle plate.

BY: NEW YORK SERVICE DEPARTMENT

Continued.....