

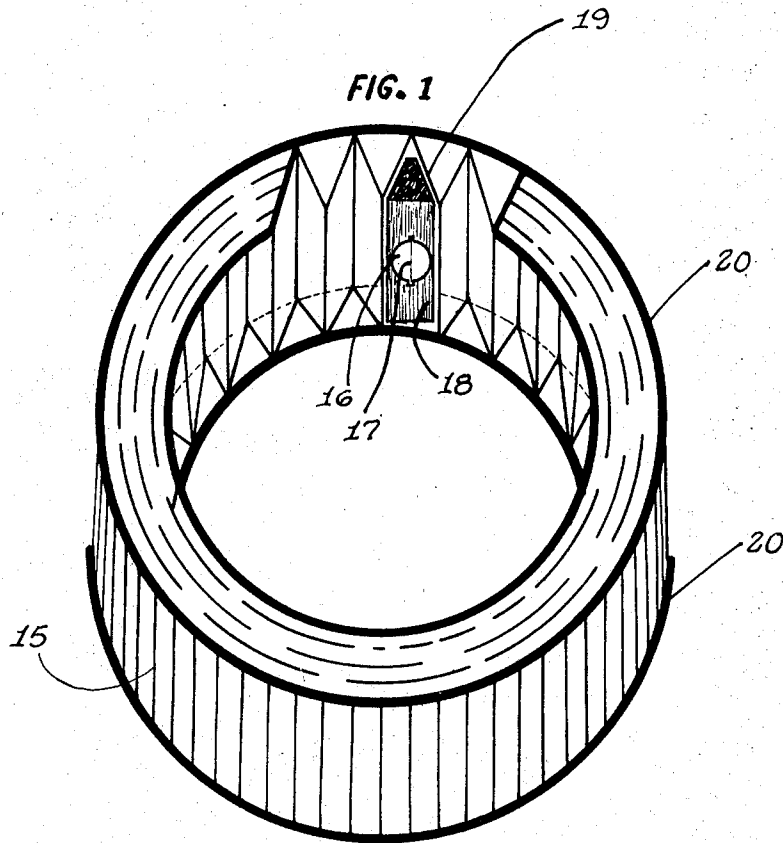
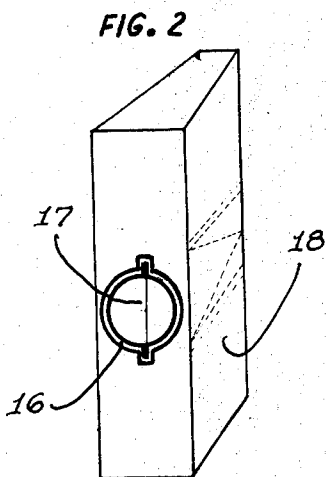
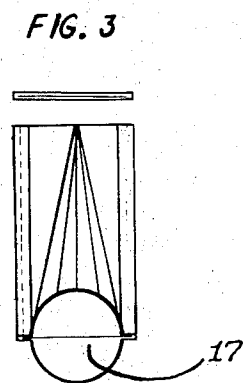
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CARBURETOR AIR INTAKE FILTERS

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CARBURETOR AIR INTAKE FILTERS

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1 Claim

ABSTRACT OF THE DISCLOSURE

An annular pleated filter with a vibrating reed warning device bonded to the end gaskets within a pleat of the filter.

This invention relates to air filters and more particularly to such as are used in automobile carburetor air intake.

Our major problem all over the country today is auto air pollution and what is being done in reducing it. Automobile owners, gas stations and auto repair shops do not have a way to determine the condition of auto carburetor air intake filters, a major cause of auto air pollution. The only means they have to determine the condition of auto air intake carburetor filters is compressed air hose and a drop light. But this is not the way to determine the condition of a carburetor air intake filter if it is up to manufacturers specification to see if it is in need of replacement, and in the mean time automobiles are burning excessive gas, excessive oil, loss of power, car engine stalling which causes many accidents on the road. Unnecessary wear on the engine, improper mixture of air and fuel are major causes of carburetor fires, and cause excessive smoke from the exhaust system. All put together we have auto air pollution.

It is therefore an object of this invention to improve carburetor air intake filters with a combination vacuum sensing sound producing porthole vibrating reed wedge to warn the operator of a motor vehicle which is being operated that it is polluting the air due to a faulty carburetor air intake filter which needs immediate replacing. The warning sound from the combination vacuum sensing sound producing vibrating reed wedge will only sound when the carburetor air intake drops below automobile manufacturers specifications. With the running of the engine this sound will indicate the carburetor air intake filter is faulty.

The warning device will continue to sound until the carburetor air intake filter is replaced with a new one to curb out auto air pollution.

These prominent objects are accomplished by the novel construction and arrangement of parts hereinafter described and shown in the accompanying drawing, constituting an essential component of this disclosure, and in which:

FIG. 1 illustrates my new invention an improved carburetor air intake filter with a auto air pollution warning device which is a combination vacuum sensing sound producing porthole vibrating reed and wedge.

FIG. 2 shows the porthole and wedge.

FIG. 3 shows the auto air pollution warning reed a com-

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bination vacuum sensing sound producing porthole vibrating reed.

Referring in greater detail to the drawings the new invention will be seen to consist of a auto carburetor air intake filter 15, with a auto air pollution warning device 18 a combination vacuum sensing sound producing porthole 16 vibrating reed 17 wedge 18 as shown in FIG. 1.

The warning device 18 is placed into the V-shaped accordion filter paper 19 from the inside of the circle of the filter 15, as shown in the cutaway view in FIG. 1.

The warning device 18 and the accordion V-shaped filter paper 19 are bonded together to the top and bottom gaskets 20 to assure a dust tight fit as shown in FIG. 1.

The vacuum sensing porthole 16 wedge 18 FIG. 2 will vary in size due to different sizes and styles of auto air intake filters 15. It is also to be understood that the vacuum sensing porthole vibrating reed 17 FIG. 3 will vary in size and style to accommodate.

In the wedge 18 there is a porthole 16 through the wedge 18 as shown by the dotted lines in FIG. 2. This porthole 16 is to position and press fit the combination vacuum sensing porthole vibrating reed 17 into the porthole 16 which is in the wedge 18 as shown in FIG. 2.

The porthole 16 is also used for air suction to vibrate the calibrated warning reed 17 FIG. 3 to produce a warning sound when the auto air intake filter 15 becomes clogged up and is in need of replacement.

With the new invention installed and in operation in its factory specified carburetor base and housing it will maintain carburetor air intake to manufacturers specifications and will help curb auto air pollution.

From the foregoing it will be seen that a novel and unusually practical device for the purpose has been shown and described in its best known embodiments; therefore that is claimed as new and sought to secure by Letters Patent, is:

1. An air intake annular pleated filter in combination with a warning device comprising a wedge having an aperture therethrough supported within a pleat on the inside of the filter, a vibrating reed supported across the aperture, the wedge being bonded to top and bottom end gaskets of the filter whereby the reed vibrates to produce a warning sound to indicate a clogged filter.

References Cited

UNITED STATES PATENTS

2,782,747	2/1957	Alderfer	55—274
2,943,446	7/1960	Goodall et al.	210—90

FOREIGN PATENTS

345,440	3/1931	Great Britain.
754,496	8/1956	Great Britain.

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55—521

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