Title: AUTOMATIC WINDSHIELD WASHER FLUID RECEPTACLE HILLING SYSTEM

Abstract: This invention can be used with most vehicles using a washer fluid system. The system is composed of the grill (placed in the area where the windshield meets the hood) (3), water trough (4), filter (8), connecting hose (2), washer fluid receptacle (6), receptacle float (7), and the release cap (9) as shown in the attached figure.
Description

ATOMIC WINDSHIELD WASHER FLUID RECEPTACLE FILLING SYSTEM

[I] This invention can be used with most vehicles using a washer fluid system related to windshield wipers (1). The system comprises a grill (placed in the area where the windshield meets the hood) (3), water trough (4), filter (8), connecting hose (2), washer fluid receptacle (6), receptacle float (7), and the release cap (9) as shown in the attached figure.

[2] The current system requires the hood of the car to first be raised, the cap of the washer fluid receptacle to be removed, then the washer fluid receptacle to be filled with fluid. However, after raising the hood and removing the washer fluid receptacle cap, finding suitable washer fluid and completing this task is not always convenient when necessary. With this invention, whenever it rains, the washer fluid receptacle will automatically be filled by filtered rainwater.

[3] The purpose of this invention is to provide the driver with an easy and trouble-free solution. Explanation of how the system works is found below.

[4] Our invention is a system comprising nine parts listed below and provides for the automatic refilling of the washer fluid receptacle with filtered rainwater when it rains. In order for rainwater to enter the washer fluid receptacle, the grill (3), which runs parallel to the bottom of the windshield where the windshield meets the hood, allows rain to enter and flow through the water trough (4) which runs parallel to the bottom of the windshield underneath the hood. The rainwater then flows through the filter (8), through a small connecting hose (2) into the washer fluid receptacle allowing it to fill to the washer fluid receptacle (6).

[5] The receptacle float (7) prevents water from entering the washer fluid receptacle when it is full. In addition, the release cap (9) which is found at the lower end of the water trough can be opened or closed by the driver accessing a switch/button on the instrument panel manually preventing water entering the receptacle.

[6] Involved parts are listed here corresponding to the diagram as shown below.


[8] 2) Connecting Hose

[9] 3) Grill Cover (for Water Trough)

[10] 4) Water Trough (Sloped)

[II] 5) Washer Fluid Receptacle Cap

[12] 6) Washer Fluid Receptacle

[13] 7) Float
The system consists of these 9 main parts.

Stretching the width of the hood just below the windshield under the hood, a sloped water trough covered by a grill (3) is to be attached. A small connecting hose (2) will connect this water trough to the washer fluid receptacle (6). When it rains, water which passes through the grill (3) and into the water trough (4) will then pass through the filter (8). Finally, filtered rainwater will enter the washer fluid receptacle (6) after passing through the small connecting hose (2). A small float (7) inside the washer fluid receptacle (6) will stop the inflow of rainwater when it becomes full. Both the grill (3) (water trough covering) and the filter (8) can be removed for cleaning and replaced. Optionally, the driver will be able to open or close the release cap (9) from a switch/button on the instrument panel.

The release cap (9) will be positioned at the same level as the filter manually allowing water to be discharged from the water trough.
Claims

[1] A washer fluid system for filling of the washer fluid receptacle with rainwater, comprising a grill (3) through which the rainwater passes into the water through (4), a water through (4) which is sloped at a suitable downward degree in order for rainwater to reach the washer fluid receptacle (6), a filter (8) located at the bottom point of water through (4), which provides second filtration, a connecting hose (2) through which the filtered rainwater by filter (8) passes to fluid receptacle (6), a fluid receptacle (6) in which the rainwater is collected and a receptacle float (7) which is located inside the washer fluid receptacle (6), prevents overfilling, characterized in that the said system provides the washer fluid receptacle (6) automatically to be filled with filtered rainwater when it rains.

[2] A washer fluid system as defined in Claim 1 characterized in that the grill (3) which extends the width of and runs parallel to the bottom of the windshield, is positioned under the hood and the filter (8) are removable.

[3] A washer fluid system as defined in Claims 1 and 2 characterized in that the release cap (9) positioned beside and at the same level as the filter (8) at the bottom of the water trough (4), can be opened by the driver from a switch/button on the instrument panel allowing water to escape from the water trough (4) to the ground when the washer fluid receptacle (6) becomes full.

[4] A washer fluid system as defined in anyone of the preceding claims, characterized in that the usage of the system is optional and the feature of the said system can be deactivated by the driver by use of a switch/button on the instrument panel which opens the release cap to discharge any rainwater entering the system.
A. CLASSIFICATION OF SUBJECT MATTER
INV. B60S1/50 B62D25/08

According to International Patent Classification (IPC), or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
B60S B62D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Relevant to claim No</th>
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