

PET WASHING MACHINE

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Abstract: The project is based on manufacturing of Pet washing machine. Here in this report design and development of dog washing machine is present. Hygiene of dog is matter of issue in our society as a result of which many diseases are spreading within the animal and the society. The dog owners find it difficult to wash their dogs properly because of which many skin diseases may find their way to the specie. The project emphasizes on proper cleaning of dogs without any manual effort. It is a dog friendly machine that allows them to relax and enjoy the bath.

Keywords: *Blowers, Pipes, Jets, Sprinklers, Brushes*

1. INTRODUCTION

These days the most common pet are dogs. There are many dogs that get skin infections and itchinness due to improper bathing. We see many dogs who like to participate in outdoor activities, playing in dirt, rolling in grass, which make them dirty and the owner cannot wash them regularly and find it difficult to clean them on daily basis. This results in bad hygiene. Thus seeing all these things around, the idea to make a machine that makes washing and cleaning of dog easier and less time consuming with less effort came to our min. To deal with dogs could be quite frustrating at times especially while making them bathe and doing it on regular basis is time consuming and much difficult .Our project takes care of such problem which

helps the owners helps the owners to wash their dogs without much effort as it involves automated bathing and drying system. It involves sprinkler jets for bathing, blowers and rollers for drying. It can be adjusted according to the size of dogs. Dog washing machine is a simple device that is easy to operate and is at the same time very convenient for bathing any dog. It is based on simple mechanism which consists of objects like shower, blower, brush (for massage). The machine size can be adjusted accordingly as per requirements. This machine is fully automatic which reduces time and effort and is dog friendly. It consists of a trolley which helps the owner to move from one place to another.

2. LITERATURE REVIEW

A comprehensive study of the existing information related to the dog washing machine is carried. The basic idea is taken from washing machine: A **washing machine (laundry machine, clothes washer, or washer)** is a device used to wash laundry. The term is mostly applied to machines that use water as opposed to dry cleaning (which uses alternative cleaning fluids, and is performed by specialist businesses) or ultrasonic cleaner. The user adds laundry detergent which is sold in liquid or powder form to the wash water. Automated car wash A **car wash**, or **auto wash** is a facility used to clean the exterior and,

in some cases, the interior of motor vehicles. Car washes can be self-serve, fully automated, or full service with attendants who wash the vehicle. It may also be an event where people pay to have their cars washed by volunteers as a method to raise money for some purpose

Dog-o-Matic Machine:Invented by Romain Jarry, a 31-year-old Frenchman, the Dog-o-Matic is a pet washing machine that turns your pooch from filthy to fluffy in just 30 minutes. Jarry says his machine proved a real success in his hometown of St Max, and he's now thinking of introducing it to the rest of France, and soon Britain. He claims the Dog-o-Matic isn't harmful to animals, as they just sit inside waiting to be washed and dried. I reckon that depends on how used the animals are to water, the puppy in the photos doesn't seem very calm and comfortable. All the pet-owner has to do is put the dog/cat inside the Dog-o-Matic, set the wash cycle and select the animal's size. I have a feeling the Dog-o-Matic will be in a world of trouble once PETA hears about it, those guys don't joke around when animal cruelty is mentioned. The above mentioned work is relatable to what this machine is going to perform which is rare and no such promising work has been done. These are time consuming, labour intensive, high cost and not globalised also they are not satisfying enough for the pets .So Dog Washing Machine is covering all these issues and resolving in better way for future.

3. METHODOLOGY

The dog washing machine consists of shower, blower, roller and brushes. First we assemble all the parts as per design and requirements and then the dog is walked in with its face through the facing wall. Then by using proper pressure water is supplied and brush cleans out the dirt. Then waste water is rinsed out from the sink. The proposed solution is given here as we can see in that the design of frames are given and these frames will be used for the tough base of machine and for mechanism

which will help in cleaning. The Fig.1 illustrates, the design main frame of pet washing machine.

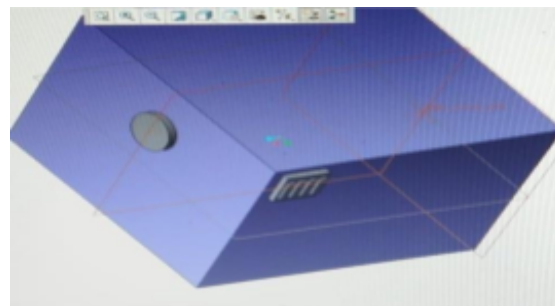


Fig.1 Frame of Machine

The Fig.2 illustrates, frame of blower for the support.

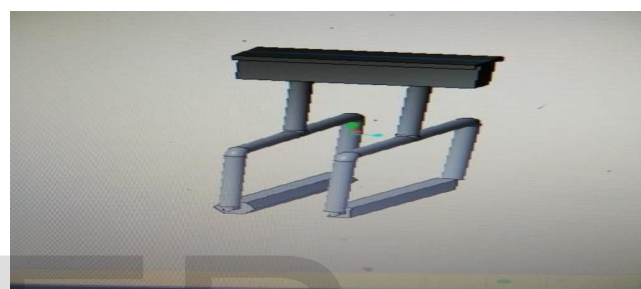


Fig.2 Frame of Blower

The Fig.3 illustrates, pipe interconnection

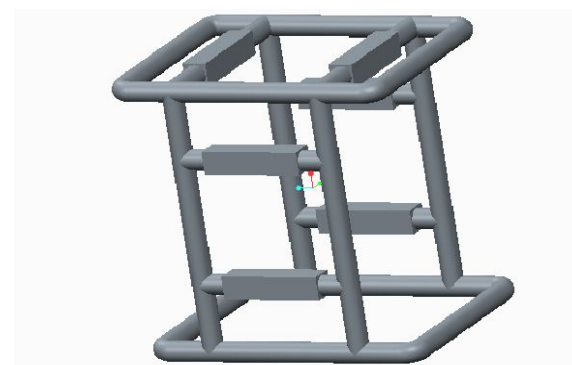


Fig.3 Pipe interconnection

4. COMPONENTS

4.1. Pipe

PVC Pipe is a long hollow cylindrical following certain dimensional rules used to transfer water from one place to another. The Fig.4 illustrates pipes.



Fig.4 Pipes

4.2. Plastic Sheets

Polypropylene plastic sheet is used because of its high density and high tensile strength which gives the machine a solid frame. The Fig.5 illustrates plastic sheets.



Fig.5 Plastic Sheet

4.3. Electronic Switches

These switches will be used to provide electricity to machine according to the task performed by it like rinse. The Fig.6 Electronic Circuit and Switches.



Fig.6 Electronic Circuit and Switches

4.4. Blowers

It is used for drying the dog, the Fig.7 illustrates blower.



Fig:- 7 Blower

4.5. Sprinklers

It uses the method of applying water to a controlled manner similar to rainfall. The water is distributed through a network that may consist of pumps, valves, pipes, and sprinklers. Sprinklers can be used for residential, industrial, and agriculture, the Fig.8 illustrates sprinklers.



Fig.8 Sprinkler

4.6. Brushes

It will remove the impurity and also provide proper cleaning of the pet. The Fig.9 illustrates brushes.

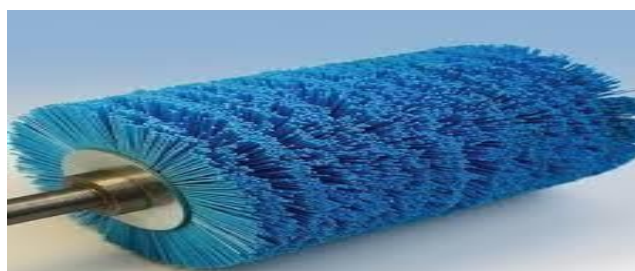


Fig.9 Brushes

5. WORKING

Dog washing machine uses sprinklers to sprinkle water throughout the body of the dog which cleans out the dirt upto some extent and then cleansing agent is introduced in the water which eventually cleans the skin and fur of the dog. And then the blower is turned on along with the brush which will relax the dog. Water is supplied through the pipes and then to sprinkler with the help of a pump which covers every part of the body by dispensing water at every part due to its design. When the body is thoroughly wet then water knob is closed and cleanser is added and supplied through pipes. Then again clean water is supplied along with brushes which cleans out the mud completely. To dry out the dog, blower supplies a gush of air is supplied on body by using a to and fro mechanism. To clear out the waste water the base is attached with a sink through which a pipe collects the waste water. The height, width and length are adjustable according to dog's size as three of the wall are extendable.

6. CONCLUSION

This is a good alternative to conventional dog bathing because bathing your furry friend can be a time-consuming and labour intensive method. In today's fast-paced world, a dog wash machine can provide a simple and easy solution to this kind of chore. This machine reports the automatic units for washing function as a form of hydro massage to ease muscle soreness and relieve stress. It will serve as a great provider of physical therapy. Furthermore, it improves the pet owner's capacity to keep their pets clean and healthy in a hassle-free fashion.

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