

THE ROLE OF GASKETS IN AVIATION AND HOW GORILLA GASKET HELPS THE INDUSTRY

News / Airlines



The aviation industry is something that has over the last 100 years become a global giant, transporting millions of people each year to take vacations or for business purposes. It spans the entire planet with flights now possible between every country and employing over 11 million people. Without the development of the industry, the world would be a very different place. When the Wright brothers first developed the aircraft in 1903 they could not have predicted the importance of the work they had done and how it would help shape the future that we know today.

Every part of an aircraft is meticulously engineered with the safety of the occupants being the number one concern of manufactures and owners alike. Maintaining an aircraft is key and no part is to be overlooked. From commercial to pleasure aircraft they all have to be regularly checked for any faults that may have developed in the course of use. The engine especially requires attention and service, if you need to [buy gaskets](#) or other spare parts that have become worn it is very important not to neglect the maintenance, safety is after all paramount.

How to know if you have a Gasket Problem

Gaskets are a very serious part of the engines used in our cars, motorbike, or boats and play a

huge role in the smooth running of the vehicles that we use daily, including aircraft. Gaskets help to prevent dust and dirt from affecting the performance of an engine and helping the engine maintain its peak efficiency. There are many signs that signs you may have issues with your gasket and these include:

- The Leaking of coolant is a sign you may have a problem and should not be neglected.
- Discoloration of the oil within your vehicle.
- Overheating of the engine
- The fumes from the exhaust having white color
- The formation of bubbles in the overflow compartment and radiator
- A misfire of the cylinders

These are just some of the warnings that there may well be an issue with a gasket and should not be ignored. Taking your vehicle to have an inspection by a certified mechanic as soon as possible is essential.

The Aviation Industry and the Problems During Covid-19

During this pandemic, many industries are facing an incredibly difficult time, and [the aviation industry more than some](#). With global travel down and many flights canceled the number of commercial flights has dramatically decreased. Many countries have essentially sealed their borders and with quarantine being enforced the tourism industry has been severely affected. The airline industry is facing an 80 billion dollar loss in 2020 but despite this, the orders for new aircraft are still strong according to recent reports. And the need for maintenance of current aircraft is also in high demand.

Whilst many commercial flights have been canceled the private sector of aviation has still been operating, with many business trips that are deemed essential. Air cargo and mail flights still have to fly, the military is not affected and organizations such as the World Food Program and United Nations and all these planes need regular maintenance which is helping the staff at airports and support crew during these troubling times.

The Different Types of Gaskets Used in Industry

There are many types of gaskets that come in all shapes and sizes depending on the engine manufacturer's needs and requirements. Most gaskets are made to be used to seal parts that may have been made to a high standard but may not have a high finishing grade on the surface and the gasket will seal the parts with precision preventing any leaks from occurring. Here are some examples of the type of gasket materials used today:

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Metal and Sheet Material Gaskets: Probably the most used type of gasket around the world, it involves punching out or a milling process. The material needs to be softer than the flange preventing damage and makes it better at sealing any gaps.

- Rubber: You may be surprised to learn that rubber is used but it is one of the most versatile materials used for gaskets. Used for engineering purposes from the construction of bridges, aviation, car production, and even fridges helping to seal in the cold and keep the items fresh.
- Asbestos: A material that is abundant throughout the world and has been used in many industries and works as an excellent material for making gaskets. Although most manufacturers in the developed world now opt to use a non-asbestos version, with the [health risks now understood and the danger](#) to human health with using asbestos.

There are many types of material being used around the world in the manufacturing industry of gaskets and the one you choose should not always be the cheapest but the one that suits the need of the product they will be helping to contain leaks of fluid or gases.

The Need for Quality Gaskets in the Aviation Industry

With safety within the aviation industry being paramount the high standard of manufacturing parts and the final inspection of products is essential. Companies that work in this field must have a high-quality team of engineers and meet strict tolerances and guidelines. Companies like Rolls Royce, Boeing, Lockheed Martin, General Dynamics, and Airbus require the products they outsource to other engineering firms are of the highest quality possible and gaskets are an integral component of any plane or helicopter whether it is for civilian or military use.

Gaskets used within the industry are designed to withstand [extreme temperatures that the aircraft will experience during flight](#), the pressure of high speeds, be flame resistant, also not be affected by corrosive chemicals that are used within the aircraft and the extreme conditions in which many aircraft have to endure during flight. During the assembly process, trained engineers install gaskets and during any routine maintenance need to be checked and changed if any natural wear and tear are found to help prevent any potential failure with the aircraft.

Other Industries That Gaskets are Used by

Other than being used in the aviation industry gaskets are used in many other manufactured products and are all around us including the automobile industry helping to seal the engines and preventing oil and coolant mixing and damaging the engine and the performance of your vehicle:

- The Electrical Industry: Gaskets are used to help create weather seals and help keep the elements at bay.
- The Marine Industry: Has a high demand for gaskets to help keep water from affecting the vessel's performance, not just with the engines but also sealing the compartments in case of a leak of exhaust fumes.

Gaskets have so many uses it is easy to forget the essential role they play in everyday life, helping us get to work or do the school run to collect our children and help us [get that much-needed vacation](#).

Conclusion

Because of the nature of gaskets, you may not notice how big a part they play in lives, often unseen they perform a vital part of the working process of the things that we are accustomed to. Having a well-made gasket can save you financially when it comes to the longevity of the engine in your car, motorbike and even helps to keep the food in your fridge fresh.

10 FEBRUARY 2021

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