



MGM Brakes Breather Tube Technology

The MGM breather tube technology was first introduced in the mid-1980's on piston brakes in Europe and was eventually adapted for the North American market to enhance MGM's spring brake technology. The breather tube, also sometimes referred to as a vent tube, has been an integral part of MGM's spring brake offering; providing decades of effective spring side protection from external contaminants and premature power (emergency) spring failure.

Why Breather Tube Brakes?

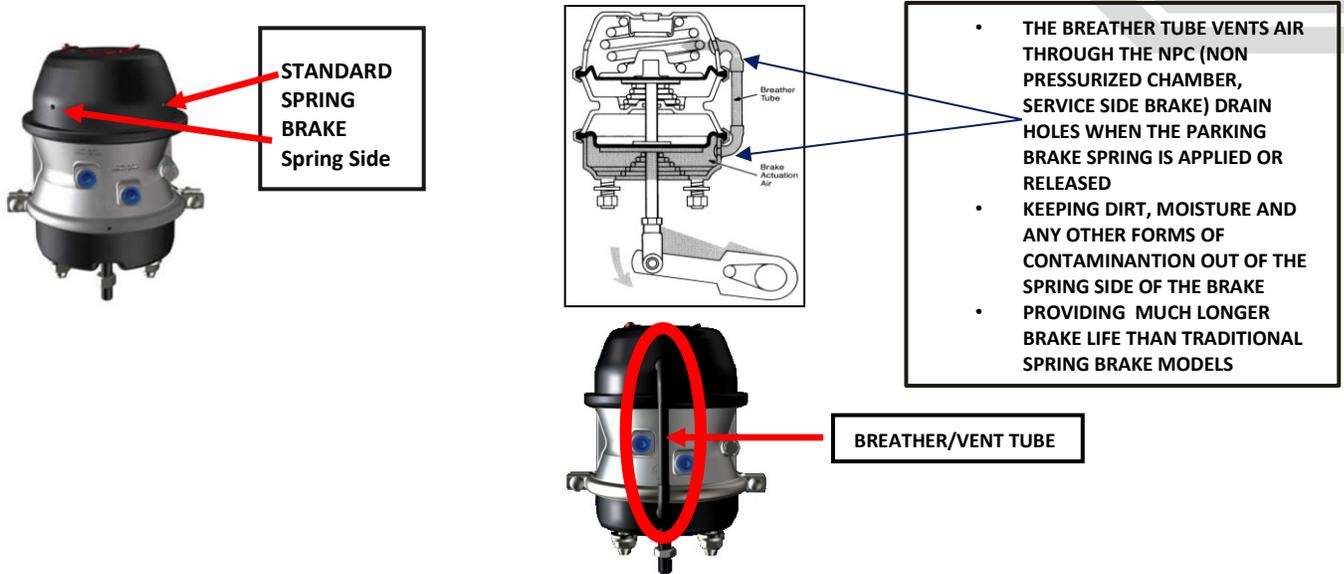
The breather tube has always been a reliable way to effectively increase spring brake life making this simple, yet effective technology a staple in the MGM Brakes product offering. As commercial vehicle operating environments become more challenging; placing greater demand on component parts and equipment longevity, the breather tube has emerged as a dependable way to help spring brakes last longer. In MGM's lab testing, where brake chambers with breather tube technology were tested against the traditional, non-vent tube chamber, the service life of the breather tube brake chamber lasted three (3) times longer compared to the service life of the traditional non-tube design. The breather/vent tube has been proven to be a requested feature by vehicle fleets operating in demanding environments such as military, refuse, snow removal, road maintenance, construction, logging, transit bus and other vocational applications; conditions that require the spring side of the brake sealed from environmental contaminants.

The benefits the breather tube brake chamber can provide are not restricted to the vocational fleet. With today's increased environmental challenges for on-highway tractors and trailers, fleets should consider the breather tube brake chamber as a standard specification for increased service life and durability. One of the most problematic issues on-highway fleets experience is corrosion due to harsh chemical agents used on roadways to reduce snow and ice build-up. The road spray generated by commercial vehicle movement spread these chemicals over the entire undercarriage creating the perfect environment for corrosion to occur. The breather tube seals out these spring side contaminants which contribute heavily to premature power spring failure. When breather tube model brakes are used on long haul applications, there is significant improvement in brake life and longevity.

How Does The Breather Tube Brake Work?

The MGM breather tube technology seals the brake spring side by removing traditional vent holes in the head of the brake and only allows atmospheric air pressure to be vented when the power/emergency parking spring is applied or released. The single large breather hole in the head of the brake is connected to the service side of the spring brake by a single tube and elbows allowing air to be vented through the service side drain holes. The breather tube material is made of "Synflex" nylon tubing which is 3/8" in diameter and is connected to the brake by neoprene elbows.

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Real World Breather Tube Brake Performance

Below are some visual examples of the effectiveness of the MGM Brakes breather tube performance and the protection it provides to the interior of the spring brake. Notice the absence of corrosion or wear on the interior components of the brake combined with the exterior epoxy coating applied to the head and non-pressurized housing service side brake. This makes this spring brake model more robust and increases service life.



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Contamination that builds up in the spring side of a non-breather tube brake can be severe in certain operating conditions, contributing to power (parking/emergency) spring failure.



This non-tube spring brake was in service for three years and illustrates the severe operating conditions which commercial vehicles can experience.



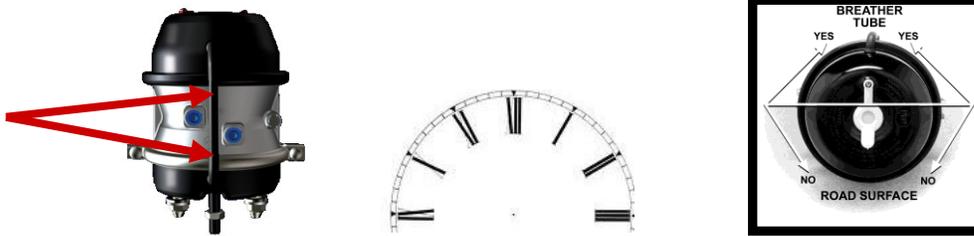
The MGM TR-TS (fully epoxy coated) breather tube brake pictured below is one of the preferred MGM brake models used in severe service and corrosive environments. The brake in the pictures below had been in service for one year showing how the breather tube has kept the interior of the spring brake preserved and in pristine condition.



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Breather Tube Brake Installation

MGM recommends that breather or vent tube brakes be installed with the tube facing away from the roadside between the 9 o'clock and 3 o'clock position to avoid trapping moisture and contaminants. These contaminants could enter the spring side of the brake through a siphoning action caused by the application and release of the power (parking/emergency) spring if installed incorrectly. Installing breather tube model brakes in the correct position will provide maximum performance and service life.



Breather Tube Brake Models

MGM Brakes manufactures the following spring brake models with breather/vent tubes:



TRB Air Disc Brakes



MJB Air Disc Brakes



TR-T S-cam Brakes



TR-TS S-cam Brakes



MJS S-cam Brakes



LTR-T S-cam Brakes



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Breather Tube Brakes Work

The wide variety of breather tube model brakes offered by MGM meets specific performance requirements for various commercial vehicle applications within many different market segments. Over the last 30+ years since its initial introduction to the North American market, the breather tube brake has proven to be one of the most effective features on spring brakes to provide maximum performance and durability for commercial vehicle braking systems. MGM aftermarket breather tube brake warranties vary by brake model and application, which can be reviewed in the current MGM warranty policy, available on our website: <https://bit.ly/2RaRIUu>

The breather tube model brake should be the standard for all commercial vehicle equipment manufactured today.