



MGM Brakes

A Division of Indian Head Industries, Inc.

TECHNICAL BULLETIN

SUBJECT: Neoprene Diaphragm Wear Characteristics

Compared to natural rubber diaphragms, neoprene diaphragms offer superior resistance to degradation due to contact with oil and other chemicals in the vehicle's air system.

The chemistry of the neoprene diaphragms that make them an excellent choice for severe service applications also contributes to its unique wear characteristics when compared to rubber diaphragms. This will be most evident on the non-pressure side of the diaphragm, as seen in Figure 1. The pressure side of the diaphragm will not exhibit this type of degradation, as seen in air system.

This type of wear can be expected on a neoprene diaphragm. However, appearance alone is not a reliable indicator of diaphragm performance, as structural integrity may still be intact and oil resistance will still be present.

When servicing the actuator service side diaphragm, and wear such as that exhibited in Figure 1 is observed, note that this is normal wear and should not be cause for concern. Simply replace the diaphragm as part of your normal service / preventative maintenance process.

Both photos were taken after completing and passing MGM Brakes' accelerated durability testing.



Figure 1 – Non-pressure side



Figure 2 – Pressure side