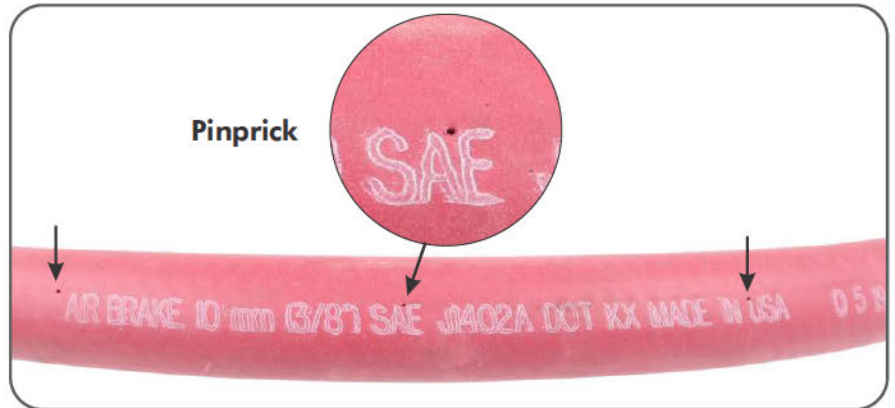
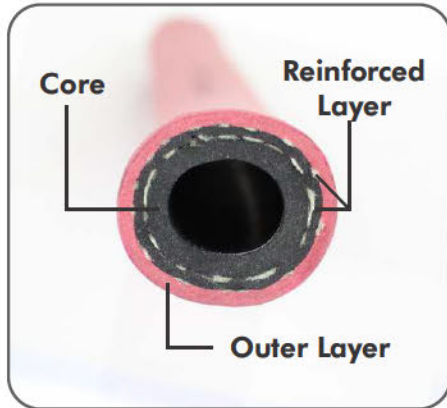


Pinpricking Rubber Air Hoses

If you've ever looked carefully at a rubber air hose, you may have noticed tiny uniformed holes, or pinpricks, along the length of the line. But what purpose do they serve?

Anatomy of a Rubber Air Hose

The construction of a rubber air hose consists of a core rubber tubing, reinforced with a spiral polyester weave, and covered with an outer rubber layer. However, what's interesting is that during production, a wheel pierces the outer layer creating uniformly spaced pinpricks along the entire length of the hose. Often mistaken as unintentional punctures, these tiny holes are in fact, deliberate.



Rubber Permeability

Rubber is a permeable material, meaning that at a slow rate, steam, air, and gaseous products can pass through the rubber barrier. Air pushed throughout a tractor/trailer's pneumatic braking system under high amounts of pressure, will begin to penetrate through the core of the rubber tubing accumulating in-between the layer of reinforcement and outer covering. Swelling and bubbling would become visible under the outer layer where these gasses would begin to buildup, damaging, or possibly bursting the hose. However, pinpricking permits trapped gases between these two layers to escape, extending the life of the air line and avoiding possible damage, which can lead to downtime.

TIPS

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- Rubber is a permeable material meaning air/gases can slowly pass through the rubber barrier.
- Pinpricking the outer cover lets trapped gasses escape that have accumulated between air hose layers.
- Pinpricking extends the life of a rubber air line and avoids the possibility of downtime due to damage.

PRODUCT INFORMATION related to this article is available [here](#).

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