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## Air Brake Hose Pin Pricks in the Outer Cover

From time to time concerns are raised regarding the pin pricks in the outer cover of hose. Generally, the concern is in the perception that the holes penetrate through the complete hose wall. This is not the case. In fact, the inner core tube is protected by the existence of the pin pricks. Sometimes, "bubbling" may be observed coming from the hose at the location of the pin pricks during instances when the hose is wet. In other cases, moisture may be seen escaping from these holes in an otherwise dry environment.

There is a normal permeation of moisture and gases through the tube and within the assembly. The pin pricks in the cover provide an escape route for these, when the hose is pressurized. This prevents hose blistering, loss of adhesion, freezing and premature hose failure. Bubbling gases or escaping moisture will subside after the hose has been under pressure for awhile, (generally in less than 30 minutes).

While pin pricking, or adding perforations to the cover of the hose, is the common practice of most hose manufacturers, it is not performed by all manufacturers. This causes some confusion on the part of the user. It is a desirable practice for hoses designed to convey air or fluids under pressure and is even used in hoses designed for high pressure.

Hose can be tested to assure its integrity by pressurizing it with air at 150 psi or less and placing it under water. A true leak will be characterized by the presence of rapid continuous bubbling while it is under water.

