

## Removable Mounting to Asphalt

## Application Note AN25 1FEB2016

This application note addresses installations to asphalt where the equipment needs to be removed and reinstalled on a regular basis. Typical applications are winter removal, exchanges for service or maintenance and regular product upgrades. The applicable AAG BoltHold™ anchors are models SP10, SP12 and SP18.

There are 2 special issues that need to be considered for such applications:

- Protecting the anchor's thread when not in use
- Limiting rust from seizing the thread of the bolt



We strongly urge the user to protect the thread of the anchor when the anchor is not in use, by our ThreadGuards. These are inexpensive plastic caps that snap into the anchor and protect the thread from dirt, water and other cases of damage.

## **Rust Protection**

When attaching equipment to asphalt, a steel anchor is placed in the ground and the machinery is attached to the anchors using steel bolts. Even though the bolts and the anchors are zinc plated, over time the bolts and the anchors will tend to bond. The bonding may appear as rust, but even if rust is not visible, there is likely to be galvanic material transfer between the anchor and



the bolt. The galvanic action is practically assured if any current flows from the machinery to the ground through the anchors.

The bonding between the bolts and the anchors will make removal of the bolts difficult. At the extreme, the bolts will not budge.

If excessive force is attempted to rotate the bolts, either the head of the bolt will deform allowing the wrench to slip, or the entire anchor may break loose from its hold in the asphalt and the ground below

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One solution is to apply grease to the bolt thread before attaching the bolt to the anchor. Alternately, use a stainless bolt to attach the structure to the anchor.

Some of AAG BoltHold anchors are available in stainless material. Both the anchor and the bolt and washer are made of stainless steel. These are ideal for salt environment, for applications where ground water pollution is of concern, and for easy long term removability.

