

Brake Cable Seal Saver



Problem:

Brake cables are a critical element of safe pumpjack operations. Pumpjacks with brake cables that are vertically aligned are vulnerable to water contamination when the seals break down due to sun and sand erosion. Result is frozen or compromised brake cables that may fail when engaged.

Brake cable failures are typically identified when the brake is engaged to conduct maintenance, resulting in costly delays to planned workover operations and additional expense for brake cable replacement.

Solution:

Extend the life of new and existing brake cables to prevent premature failure by installing Silverstream's Brake Cable Seal Saver. It's easy to install and a very small investment in preventative maintenance and the safety of your personnel.

Brake Cable Seal Saver

Install Instructions:

1. Shut down the pump jack and secure it at the 6:00 o'clock position. Follow all appropriate lock out and tag out procedures of the energy source.
2. Install the polished rod clamp to ensure no movement of the weights. If the unit has a Atabec Safety Lock, engage it to secure the pump jack.
3. Remove the brake cable from the pump jack.
4. Remove the hardware off the cable ie. (Clevis's top and bottom with nuts) then remove the rod seals from the top and bottom of the cable.
5. If frozen, hang the cable upside down and thaw in a warm area to allow the water to drain out. After it has thawed out, the rod seals need to be re-installed. Use oil to lubricate the seals.
6. Re-install the hardware (Clevis and locking nuts) for measurement.
7. Measure the stroke length of the cable in service.
8. Install the new brake cable for measurement. Or, re-install the existing brake cable and hardware (Clevis top and bottom locking nuts) then install the Silverstream Brake Cable Seal Saver on the top of the bottom boot and tighten the grommets until the seals can be seen, to ensure the seals are secure. {The Luftkin brake cables have little stoppers to prevent their seals from slipping down. Remove their top seal then squeeze the stoppers on to the shaft and re-install their seal.}
9. Measure the top seal tube and make sure the top seal does not interfere with the bottom seal when engaged. (This is the stroke length of the cable.)
10. Remove and cut off any excess length from the top seal tube so that it will move freely with brake cable engagement. This is critical due to the distance the internals of the brake cable will travel to engage the brake drum.
11. Tighten the grommet until the seal can be seen. Install the locking nut and Clevis.
12. Grease the cable if it has grease nipples with a grease certified to a minimum of -40° F. If the cable has plugs, then remove the plugs and install grease nipples and grease the cable.
13. Remove the polish rod clamp and lock out and tag.
14. Bump test the brake – put back into service.

Warning: It is critical this procedure is followed precisely and to ensure the top seal does not interfere with the bottom seal. Silverstream is not liable for any issues associated with the brake cable.