SHEAR GAP

This month we introduce the concept of shear gap on a baler. Shear gap is the space between the bottom of the shear and the top of the main ram knife (see picture below).

Maintaining the shear gap on a baler is key to optimal operation. If the shear gap gets too big several problems can occur. One problem caused by a large shear gap is jamming of material at the shearing point. Repeated jamming of material can result in extra stress on the structural components of the baler and possibly could cause damage to the mid and main ring.

Additionally having an optimal shear gap ensures all force created by the ram advancing is horizontal, acting to cut the material. As the shear gap gets bigger a proportionately greater amount of force is directed downward and upward causing wear and damage to the floor and main ring. The increased force also can result in longer cycle times, increased power consumption and increased hydraulic temperature, all of which can hamper production.

American Baler manufactures balers with a shear gap between 0.010 and 0.025 of an inch, which is optimal. It is our recommendation to keep this gap at 1/8” or less.

Go and measure your shear gap today, if it is greater than 1/8” it could be causing damage to your baler with each cycle. Maintaining your shear gap will help to avoid unscheduled down time and save you MONEY! Give us a call if you need assistance getting your shear gap back to an optimal level.