The Nortek® Leveler

From Nortek CopperWorks

Nortek® CopperWorks is proud to introduce the Nortek Leveler, another Nortek innovation that stands up to the test of time. The Nortek Leveler has been designed to handle the load with the person who makes the adjustments in mind. (Fig. 1)

Fig. 1

As a log home settles, the load increases on your support posts. Most of the natural settling occurs in the first few years, so timely adjustments of the settling jacks are especially important. If this critical adjustment is neglected, the load on your settling jacks has increased to an excessive level, making it difficult or even impossible to adjust the settling jacks. Often special equipment is brought in to relieve the load on the settling jack so the adjustment can be made or to replace the settling jack.

When the time comes to adjust the settling of a log home, Nortek Levelers' unique design features will make your job hassle free. Take a look and discover the true benefits of the Nortek Leveler.

Screw Support Base Plate

The end of the screw is welded to a solid steel support base plate that distributes the load evenly to the joining members or foundation of the log home. Welding, rather than threading the screw into the support plate, prevents a failure of the thin thread cross section in the support plate.

The Screw

The Nortek Leveler utilizes the ACME thread profile that was developed for the purpose of producing transverse motion or transmitting power, as compared to the commonly used Unified thread or V profile that was designed for fastening or joining. In general, with the inefficiency of the V thread profile in transmitting power, the ability of unscrewing is lessened whereas the reduced thread angles of the ACME profile provide more efficiency in moving heavy loads.

The ACME thread for the Nortek Leveler is roll formed rather than machine cut. A roll formed thread provides superior resistance to galling, stripping or seizing. The rolled thread grain structure is not severed in any way, but is, instead, reformed in unbroken lines that follow the thread contours. (fig. 2) Therefore, for a shear failure to take place, it must occur across rather than with the grain of the material.

Spider Nut

Nortek's exclusive Spider Nut has a unique shape that allows for multiple adjusting tool options. The true value of the Spider Nut's shape provides an increased surface area for load distribution onto the bronze bearing and post load plate. This added surface area prevents galling, binding and embossing of the post load plate and the adjustable nut, especially when an excessive load has been applied.

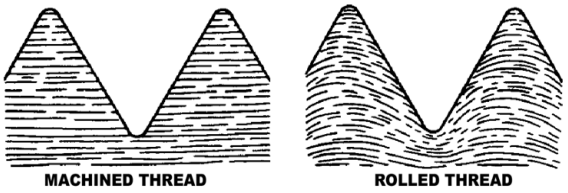

Fig. 2

If adjustments to settling jacks are not made in a timely manner, an increased load occurs on them. If need be, with the Spider Nut, a punch & sledge can break that initial load and allow adjustments.

Bronze Bearing

The surface between the Spider Nut and the Post Load Plate is where the majority of the friction resistance is encountered when trying to make your adjustment. That is why Nortek provides a large solid Bronze Bearing to relieve the friction between the Spider Nut and Post Load Plate. The Bronze Bearing reduces the friction to less than half compared to the surfaces of steel to steel.

Post Load Plate

The Post Load Plate is a solid steel plate that distributes the load evenly to the end of the vertical post. With the screw support, the screw is retracted into the post and the screw gains additional support. Should any minor shifting occur during the construction or natural settling of the log home, the screw support will help to maintain a solid vertical orientation. This support also keeps the Leveler's threaded surface moving free and clean from obstruction.

All the features of the Nortek Leveler combine to assure the post load is safe, secure and easily adjusted in the years to follow. When installing the Nortek Leveler, contact a structural engineer for proper sizing, placement and application.

The Nortek Leveler is designed with the homeowner in mind. They all handle the load but only one has been designed to handle the adjustment.

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