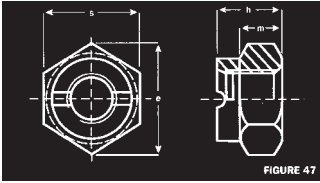


Correct Use of Jam or Lock Nuts



When a Jam or Lock Nut is to be used, it should always be placed as shown in Fig 49, not as in Fig 48.

The lock nut must always be assembled on the bolt first and pulled up snug, but not tightened severely enough to produce a high tension in the bolt.

The top nut is then assembled, and as it is tightened the threads of the lock nut must first bear upward on the bolt threads, then are free, and finally bear downward on the bolt threads, while the threads of the top nut bear upwards on the bolt threads.

Thus the two nuts are bearing in opposite directions on the threads and are **jammed**.

This locking effect will remain even if the bolt tension is lost.

The final bolt tension is therefore higher than that originally set up by the bottom nut, and may in fact be higher than could be sustained by the bottom nut alone, since most of the tension is now being supplied by the top nut.

Conclusion

The bottom nut should be the Jam or Lock Nut. It should not have a tight thread fit. It should be applied with only moderate initial torque. The top nut should be wrenched on the full torque requirements. During final wrenching, the bottom nut should be held from turning.