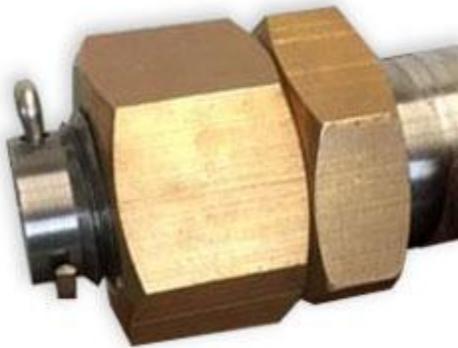


# Why Prop-Tight Nuts Are Superior

The majority of boat owners and captains of vessels with inboard engines worry about the nuts that hold the propeller on the shaft coming loose. Lets take a quick look at why standard propeller nuts come loose and show how the Prop-Tight nut solves this problem completely.

## Why do propeller nuts come loose?



The most common reason nuts come loose is that the propeller hub wasn't fitted properly to the taper of the shaft. When the hub of the propeller isn't making good contact with the taper of the shaft, the propeller can actually move forward slightly under load and lesson the torque of the nuts holding it. Another reason for the nuts loosening is that coarse threads are commonly used on inboard propeller shafts. Unlike fine threads, coarse threads are harder to tighten and will have a tendency to loosen under vibration.

## A sure way to crack a shaft.

After the propeller has been installed followed by the two shaft nuts, a cotter pin is then inserted in a predrilled hole at the very end of the shaft. This cotter pin acts as a safety to stop the nuts and the propeller from coming completely off the shaft. It does nothing to keep the nuts from coming loose in the first case. If the nuts do back off and the propeller becomes loose on the taper, all the engine torque is now focused on the key stock and will often crack the shaft at the keyway.

## What about the castle nut?



For decades there has been a nut available that is specifically designed to be held in place with a cotter pin. It is called a castle nut or castellated nut. In most cases these nuts have to be custom made in a machine shop for each propeller and shaft setup for everything to line up correctly due to the limited depth of the notches.

**One disadvantage of a castle nut is that the slightest difference in hub length with a new propeller will result in the notches of the castle nut not lining up correctly with the cotter pin hole in the shaft.**

# Never Worry About Your Propeller Nuts Coming Loose Again!



## How the Prop-Tight Propeller Locking Nut Works.

1. The Patented Prop-Tight locking propeller nut is designed to be tightened behind the jam nut and then locked in place with the cotter pin.
2. Multiple elongated slots give more flexibility for easier alignment with the cotter pin hole and make nut loosening virtually impossible.
3. With the Prop-Tight nut being locked stationary in place by the cotter pin, your propeller and nuts will now stay securely on the shaft.