THIS CHART SHOWS DANGEROUS LUGNUT INSTALLATIONS THAT COULD RESULT IN DAMAGE, INJURY AND DEATH

TIP TOO SMALL
When the diameter of the nut at the tip is too small or the lughole in the wheel is too large it can cause the nut to bottom out against the base of the rotor or brake drum before actually seating against the wheel.
This will prevent the wheel from being properly secured.

LUGNUT TOO SHORT
If the lug is not tall enough or not threaded deep enough the stud will bottom out before the nut makes proper contact with the clamping surface.
This will prevent the wheel from being properly secured.

STUD TOO SHORT
When the stud is not long enough to allow for 10 full turns of thread engagement.
This often occurs when the center pad area of the wheel is extra thick and/or spacers have been used.

NOT ENOUGH THREAD ENGAGEMENT

WRONG THREAD TYPE
Never try to use a metric thread nut on a US standard thread stud or vice versa.
While close 3/8 in and 10mm are not compatible
1/2 in and 12mm are not compatible
9/16 in and 14mm are not compatible

WRONG SEAT ANGLE
Never use a 60 conical seat nut on a wheel with a 90 conical seat lughole or vice versa.
There will not be enough contact surface to properly secure the wheel.

NOT ENOUGH THREAD IN THE NUT
Sometimes the nut appears tall enough but it may not be threaded deep enough.
This will cause the stud to bottom out in the top of the nut before the nut clamping surface properly mates to the clamping surface of the wheel.

A thorough understanding of this chart will greatly diminish the possibility of wheel loss due to improper lugnut installation. In order to help you understand this chart we will happily answer any question you may have.
**DON’T DO’S**

**SHANK TOO LONG**

The shank length of the nut is too long. The end of the nut bottoms out against the rotor or drum surface before the nut clamping surface properly mates to the clamping surface of the wheel.

**DAMAGED STUD**

Damaged or flattened threads will cause the nut to seize up before proper contact of the clamping surfaces occur. Any damaged stud must be repaired or replaced before nuts are installed.

**WRONG SHANK SIZE**

On mag shank style applications, the diameter on the lugnut is too small. The most common cause is using a passenger car lugnut on a truck wheel.

The total clearance between the lugnut shank and the wheel hole should not exceed 1/64”.

**NO WASHER**

Mag shank style applications must be used with a washer. If not the shoulder of the nut will dig into the softer aluminum preventing proper clamping of the wheel.

**WRONG WASHER ON ELONGATED AND MULTIFIT HOLES**

A) Aluminum wheels that have a specific washer recess should use a washer that was designed specifically for that recess.

The washer should fit snug and be the same shape. Do not put a round washer in an oval hole or vice versa.

B) Wheels without a washer recess or Dual and Tri fit wheels must use a washer that overlaps the hole at least 1/8 in all around and is at least 5/32 in thick.

**MOUNTING SURFACE INTERFERENCE**

When the wheel cannot be mounted flush to the vehicle mounting surface due to some form of obstruction.

The most common is drum retainer clips, rivet heads or large calipers.