Cat # 34 The Flange Fit-Up & Inspection Gauge

(The Burk Flange Alignment Tool)

Product Information And Usage Guide

~ Manufactured by G.A.L. Gage ~

Gauge Overview:

The Flange Fit-Up & Inspection Gauge is designed to streamline the inspection process for flanges that range between 150 pounds to 1200 pounds.

This tool can only be used for spiral wound gaskets - not for lap joint flange connections.

The go no-go features on the gauge allow for a quick visual of whether a flange has proper gasket crush or needs to be reworked.

The scale on the side checks for external misalignment. The back of the gauge features the ASME (American Society of Mechanical Engineers) code for proper flange measurements.

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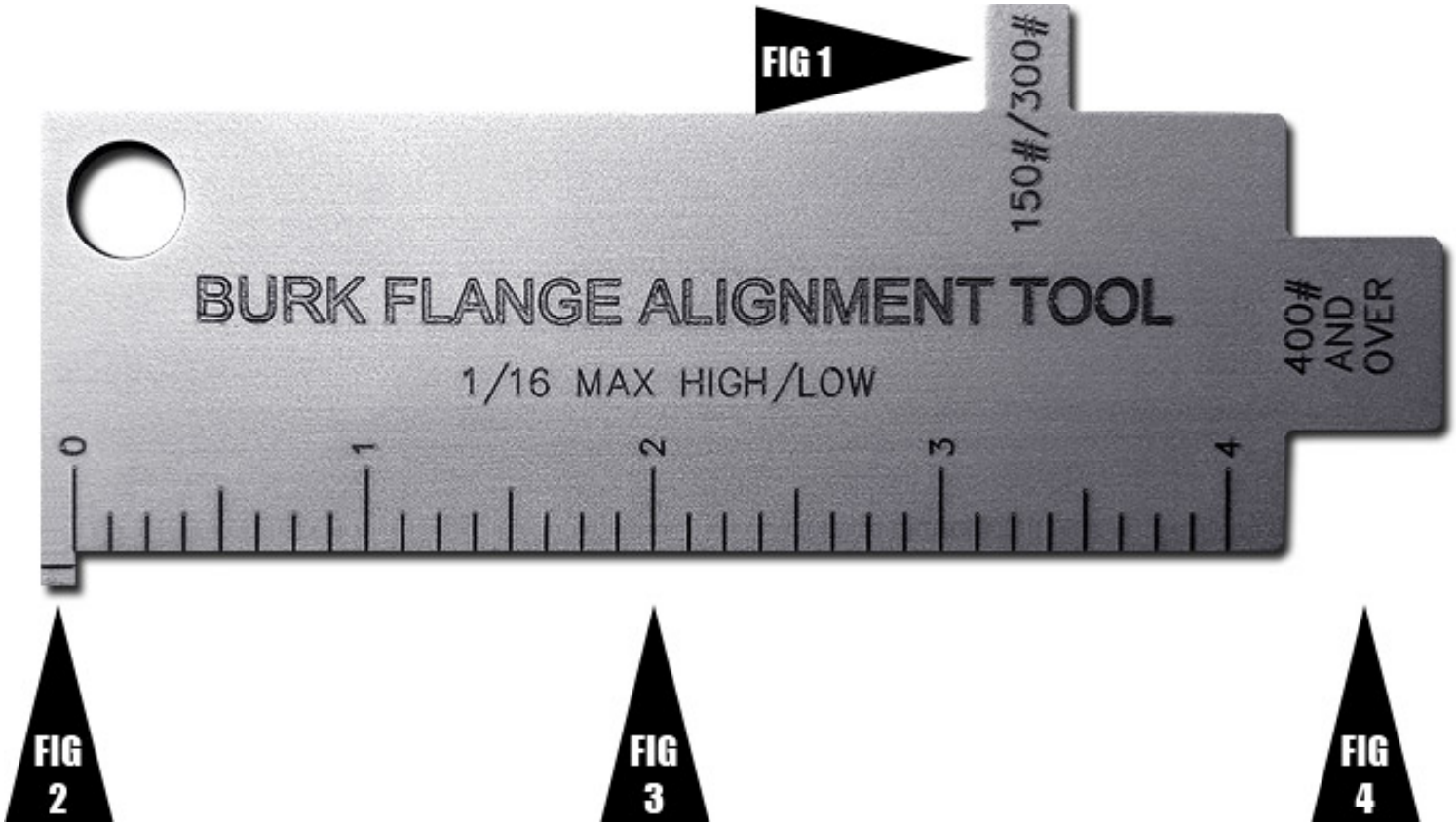
The Flange Fit-Up & Inspection Gauge
Components And Tolerances:



Gauge Features Overview:

There are four measuring components for the Flange Fit-Up & Inspection Gauge.

- **Figure 1:** The 150# / 300# nib is used as go no-go gauge for 150 pounds and 300 pound flanges.
- **Figure 2:** The 1/16” nib; located at the beginning of the scale, shows The maximum amount of external misalignment allowed.
- **Figure 3:** The scale on the side is used to measure external misalignment.
- **Figure 4:** The 400# and over are for 400 to 1200 pound flanges.

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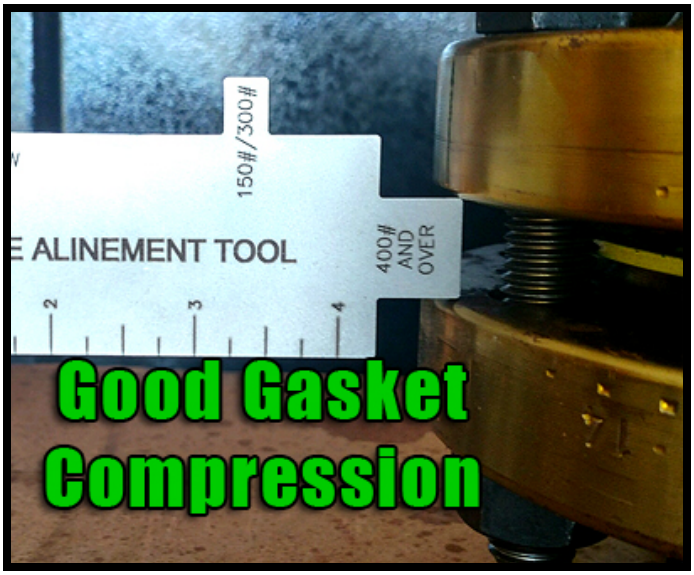
The Flange Fit-Up & Inspection Gauge Using The 400# And Over Nib:

First determine the proper nib needed based on the flange.
The 400# And Over nib is used in the two examples below.

Attempt to insert the appropriate nib of the Flange Fit-Up & Inspection Gauge in-between two bolts on the flange.

If the nib cannot enter the space between the flanges, it is considered to have Good Gasket Compression.

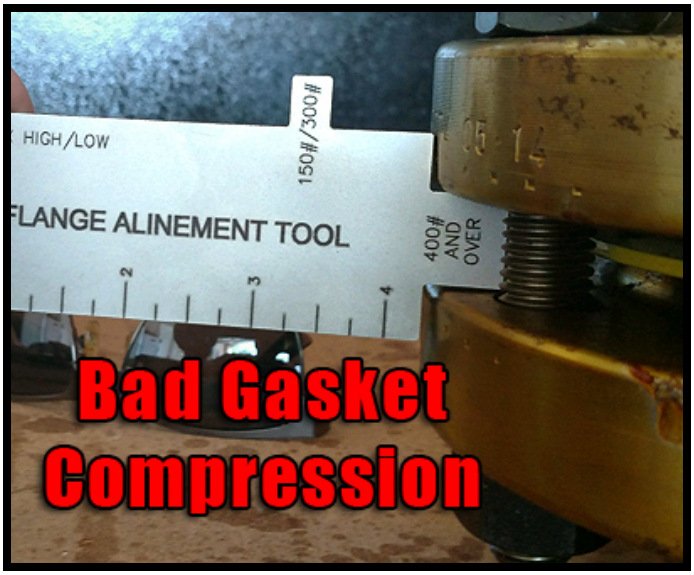
Measurements should be taken in four equally spaced locations all-around the flange.



If the nib enters the space between the two flanges then it is considered to have Bad Gasket Compression and will need to be checked for additional bolt stress.

Reassembly procedures might also be required.

Measurements should be taken in four equally spaced locations all-around the flange.



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The Flange Fit-Up & Inspection Gauge
Using The Scale For Determining External Misalignment:

The scale on the side of the Flange Fit-Up & Inspection Gauge provides a flat surface to allow for a visual of external misalignment of the two flanges.

Place the scale on the side of the flange.

If, through visual inspection, the flanges touch both the Flange Fit-Up & Inspection Gauge and the flange equally, and no light is perceived between the two, then there is no misalignment.

If, through visual inspection, one can see light between the Flange Fit-Up & Inspection Gauge and the flange, it will need to be measured using the 1/16” nib which is located at the beginning of the scale.

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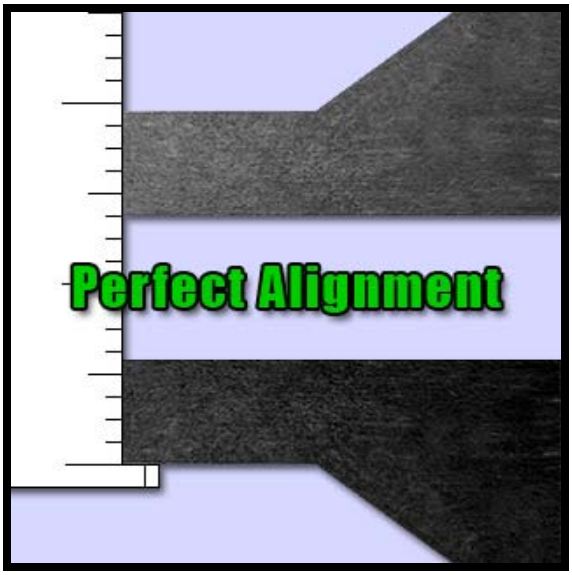
The Flange Fit-Up & Inspection Gauge Using The 1/16” Nib:

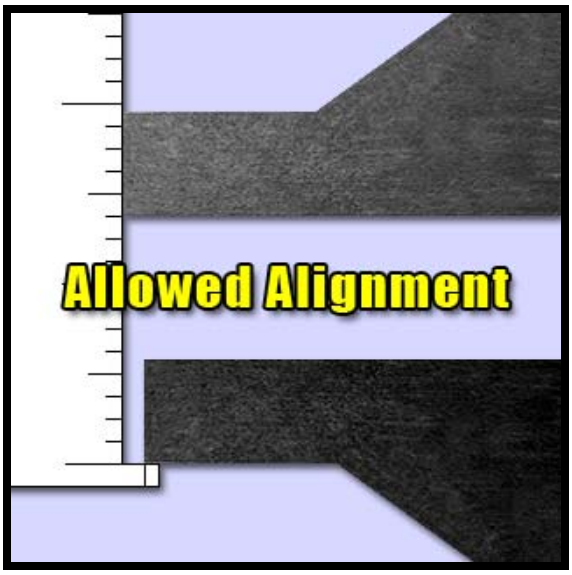
This nib is only required if a gap is perceived between the flanges and the Flange Fit-Up & Inspection Gauge.

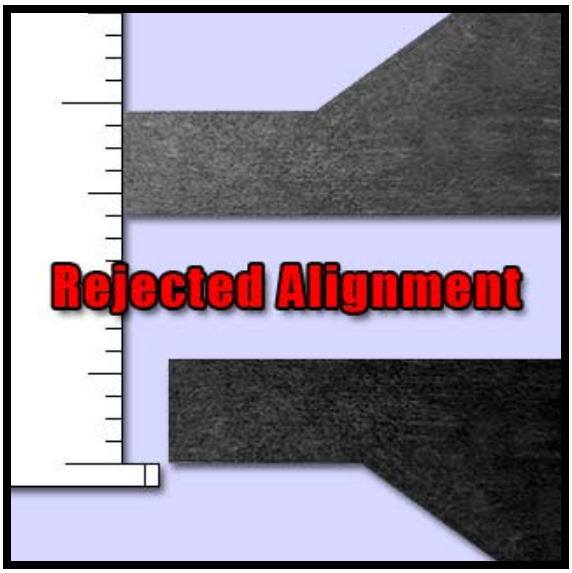
Flange tolerance codes permit only a 1/16” maximum for external misalignment is permitted. The distance between the end of the nib and the laser mark on the nib is 1/16”.

To determine if the misalignment exceeds the 1/16” minimum simply place the scale end of the Flange Fit-Up & Inspection Gauge so that the scale touches both flanges.

Please Consult Images Below For More Insight:







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