# **IENHULZEN A**UTOMOTIVE

# - INSTRUCTIONS

<u>Please view the instructions even if you think you know exactly how the</u> <u>product works.</u> Along with usage instructions they also contain some tips and tricks. Instructions are provided as online video instructions. Through customer feedback we have found this to be the preferred method, however written instructions can also be downloaded. Contact us if you have trouble accessing them. We are an American run small business and are here to help.

Both the written and video instructions are available at:

## www.AlignmentInstructions.com

## - CONTACT / HELP

Even if you purchased through a distributor, <u>contact us (the manufacturer)</u> <u>directly</u> for <u>help</u>, answers to any <u>questions</u>, <u>technical assistance</u> needs, or if your product is damaged or missing parts. We are an American run small business and are here to help. <u>Fitment issues</u> can typically be resolved as well. Response time is usually a few hours or less, even on weekends. <u>If you do not hear back</u> <u>within 24 hours</u>, check your spam folder, or try sending to the provided backup email address. <u>Manufacturer's emails</u>:

### info@TenhulzenAutomotive.com

Backup Email: TenhulzenAutomotive@gmail.com

## **– DISCLAIMER**

What you have purchased is a wheel alignment measurement tool. Changing your vehicle's alignment can alter the handling characteristics and tire wear of your vehicle. If the user does not feel comfortable adjusting a vehicle's alignment, they should not adjust a vehicle's alignment! The user is responsible for ensuring the vehicle is in safe operating condition prior to use. Tenhulzen Automotive is not responsible for any injuries, deaths, or property damages that occur from the use or misuse of its products.

#### **Tenhulzen Automotive Toe Plates Assembly Instructions**

Included hardware: 12 plastic ends, 4 short threaded shafts, 4 rubber feet, degree conversion chart.

The thumb screws are made of plastic and are designed to bend/break if you accidentally step on or drop the plates, and prevent the plates themselves from being damaged. We include a couple extra screws so you have replacements on hand. We recommend securing them to one of the plates with tape so they are easy of locate if needed.

#### **Step 1: Thread the black thumb screws**

Thread 1 of the black thumb screws into the each of the short stand-offs



#### Step 2: Assemble as desired

The stand-offs are attached on the outside of the toe plate for storage (so everything will clip together), and on the inside for measurement (so that they extend to contact the wheel). Use the 4 remaining thumb screws to attach them to the plates as desired.



#### Step 3: Attach the degree conversion chart

The degree conversion chart has a peel stick adhesive backing. You can either stick it on one of the plates, or use a paperclip to secure it through the handle hole.



#### Step 4: Attach rubber feet

The four rubber pieces attach to the bottom of the plates at each corner. These give the plates more grip and stability. A couple drops of superglue can be used if permanent attachment is desired.



Assembly should now be complete.

If you have any questions or issues, please contact us at info@TenhulzenAutomotive.com

#### **Toe Plates Toe Measurement Instructions**

The rim stand-offs work on nearly all cars and suv's, however it is possible that the sidewall on some trucks and suv's may be too tall for the stand-offs to properly contact the wheel rim. In this case either the stand-offs can be removed and the plates can be used as standard toe plates (placed flat against the tire), or a 2x4 or similar can be placed under the plates to raise them up higher.

Before you start ensure the vehicle's steering wheel is centered. If they vehicle is equipped with hub caps they will either need to be removed.

#### Step 1: Adjust flat slot plate

Place the toe plate with the straight tape measure slots close to the wheel, so that when the stand-offs are resting against the rim, the plate will be sitting vertical. Use the notch cut into the top edge of the plate to center the plate on the wheel.

Use the thumb screws to adjust the stand-offs so they will contact the rim of the wheel. When tightening is it not necessary to use two hands, simply apply some pressure to the plate while the stand-off is against the rim and the friction will allow the thumb screw to be tightened.





#### **Step 2: Extend tape measures**

Run the tape measures underneath the car as shown, 80 inches should be enough



#### Step 3: Adjust stand-offs

Use the same procedure as shown in step 1 to fit the other toe plate on the oppsite side of the vehicle and place the tape measures into the tape holder slots. Check that the stand-offs on both plates are properly seated against the rim of the wheel.

#### Step 4: Measure Toe

Unlock the tape measures and slide them into the slots. Do NOT re-lock the tape measures. Leaving them unlocked will apply the proper amount of tension. Pull on them slightly and note the measurements.



The rear tape measurement (side towards the rear of the vehicle) minus the front tape measurement (side closest to the front of the vehicle) is the total toe of the axle. A larger measurement on the front side indicates toe out, and a larger measurement on the rear side indicates toe in.

For example, if the front measurement is 66" and the rear measurement is 66 3/32 the axle has a total toe in of 3/32".

Note: When using alignment specs, note that the toe plates measure the TOTAL toe, not the toe of each wheel. Thus if your specs are given for each wheel you will need to add those values together. For example, if the toe in of each wheel is suppose to be 0.15 degrees, then the total toe should be 0.15+0.15=0.3 degrees. The optional alignment specs CD gives total toe so these specs do not need modification, however you should use the degree specifications, NOT the inch specifications.

Tip: if the toe is correct but the steering wheel is crooked, turn the tire rod on one side in, and the tie rod on the other side out an equal number of turns. This will keep the toe measurement but adjust the position of the steering wheel. Make sure to adjust it the right direction!

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