TON-IN GAUGE

I, SUMMARIZE

Ton-in Gauge consists of ruler body, bracket, probe, etc. One end of the slide ruler is connected with the spiral calibration wheel, and the other end is telescopic IN the ruler body. Ton-in Gauge is used to adjust and measure the basic dimensions of automobile front wheel. The measuring range is adjustable from 1.0m to 2.0m. It is excellent IN manufacture, simple IN operation, high IN measurement accuracy, and durable, suitable for the detection and repair of various automobile front beam. In order to maintain the proper value of the front wheel bundle, it is necessary to carry out regular four-wheel positioning. However, as the measurement and adjustment of the front wheel bundle are relatively simple, the measurement and adjustment of the front wheel bundle can be completed without special four-wheel positioning instrument as long as you are willing to do it.

II. Main technical data:

1) Size: 1260 mm 150 mm 65 mm (length * width * height)
2) Maximum size measurement: 1100mm ~ 2000mm
3). The toe-in value indication range: ±15mm
4). Solution Parameters: 0.1MM

III, Front wheel bundle inspection method:

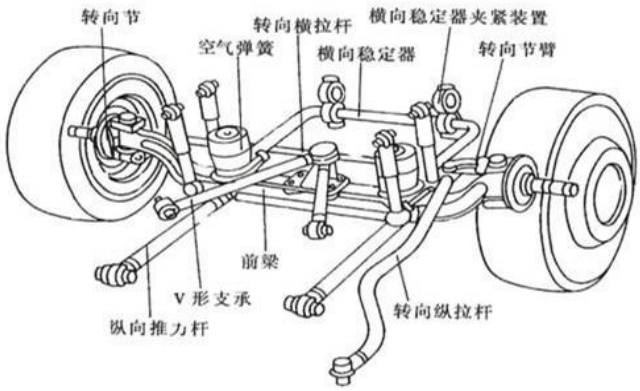
Front bundle: The front bundle is viewed from the front of the vehicle and measured under the same height of the two axles. The difference between the front and rear ends of the left and right tire centerline is called the total front bundle.The function of the front bundle is to eliminate side slip due to camber.When the front bundle is too large, the outside of the tire wear will have a positive camber Angle is too large formed by the wear state, tread wear form for feather.When the hand is stroked from the inside to the outside, the outer edge of the tread has a sharp prickling feeling.When the negative front bundle is too large, the inside of the tire will have the wear pattern formed by the negative camber Angle is too large, and the tread wear form is feather-like.When the hand is stroked from the outside to the inside, the outer edge of the tread has a sharp prickling feeling.

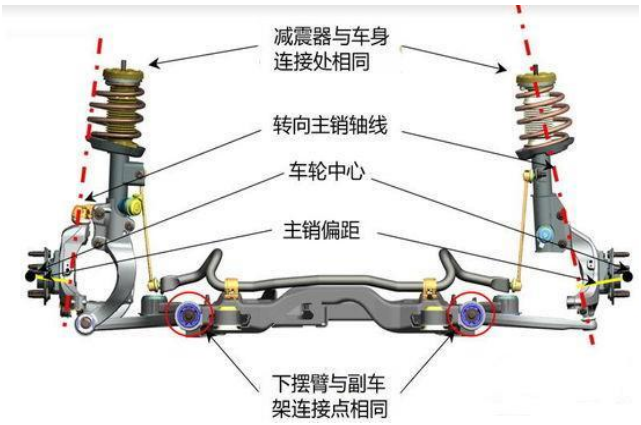
The front beam gauge is used to detect the front beam of the front wheel as follows:
1. Before checking and adjusting the front bundle of the front wheels, the fit between the knuckle kingpin and the bushing, the tightness of the wheel bearing and the tire pressure should be normal.Park the vehicle on the flat ground, make the front wheel in a straight line driving position, and push forward 1 ~ 2 meters to eliminate the impact of the inspection effect of each gap;

2. Put the front beam ruler right in front of the two front wheels, and make obvious mark points at the center of the front end face of the tire and the height of the axle. The mark point center should not be too large, which will affect the measurement accuracy.
3. Adjust the calibration wheel of the front beam ruler so that the "0" point is aligned, and move the probe on both ends of the front beam ruler to just contact the mark point marked on the front end of the tire.Then turn the two front wheels (forward push the car), the marking signs point to the rear and axis height, toe feet turn into the tyres behind, let not the scale adjustment probe tip on the side of the mark point, and then adjust scale wheel that this the probe moves to the mark point of the tire, pay attention to adjust the scale of values, toe on the feet is shown in figure is the toe-in value.(Each rotation of the scale wheel is 0.1mm, and the distance of the probe needle is 2mm once a week. The principle is the same as that of the spiral micrometer.)

IV. Adjustment mode:

The front wheel bundle can be adjusted by changing the length of the tie rod. Adjustment can be made according to the measurement position specified by the automobile manufacturer, so that the distance difference between the front and rear of the two wheels meets the requirements of the manufacturer's front beam value. Generally, the front beam value between 0 and 12mm is normal.





If the car tie rod is straight, you can loosen the locking bolt of the joint at both ends of the tie rod first, and twist the tie rod with a pipe wrench to elongate or shorten the tie rod.When the tie rod elongates, the front bundle value increases, while the tie rod shortens, the front bundle value decreases.Tighten the bolts until the front bundle meets the standard.
If the car rod is bent, the rod cannot be rotated during adjustment, but the pull head at both ends of the rod should be rotated.And because the left and right ends of the thread pitch is different, so in the adjustment should first rotate a side of the tie rod joint, if the rotation of a circle will exceed the former bundle value and return a circle and can not meet the requirements, you can rotate the other side of the tie rod joint, with the adjustment, until the requirements.Tighten the lock bolt after adjustment.

V. Matters needing attention:

1. Strictly prevent bending and deformation, and the fixed screw needles can not spin too tightly.
2. Do not use your hand to hold the pointer during measurement, or make the tip of the probe touch a hard object, so that the tip of the probe will be deformed and the measurement accuracy will be affected.
3, prevent contact with acid, alkali corrosive substances, wipe clean after use into the box.