

INSTRUCTIONS FOR: CAMBER/CASTOR MAGNETIC GAUGE Model No: **GA45**

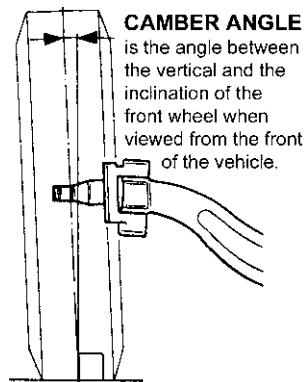
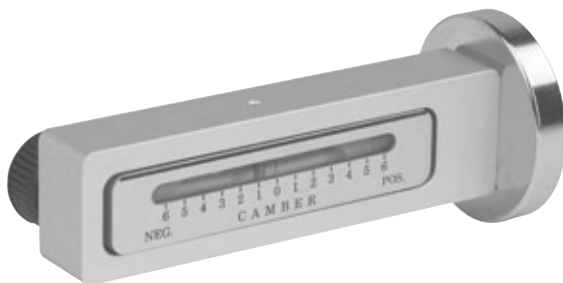
Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

1. SAFETY INSTRUCTIONS

- ☐ **WARNING!** Ensure Health & Safety, local authority, and general workshop practice regulations are adhered to when using this equipment.
- ✓ Maintain the gauge in good condition (use an authorised service agent).
- ✓ Replace or repair damaged parts.
- ☐ **WARNING!** Use the gauge on level and solid ground.
- x **DO NOT** allow untrained persons to use the gauge.
- ☐ **WARNING!** When setting front-end alignment on commercial vehicles never make adjustments to drop arms or interconnecting links. Doing so could result in serious tyre, wheel and steering problems.
- ✓ Any alignment changes deemed necessary as a result of using this equipment must be made strictly in accordance with the vehicle manufacturer's recommendations.



2. INTRODUCTION & SPECIFICATION

Robust, magnetic gauge mounts onto hub or brake disc for quick and accurate measurement of camber and castor angles. Large adjuster knob for convenient zeroing of bubble during castor angle measurement. Graduated from +6° to -6°.

3. MEASURING CAMBER ANGLE

- NOTE:** Before proceeding to check the camber, first calibrate your gauge using one of the following methods:
- a. Clamp a good quality spirit level, with transverse bubble, so that the long faces are vertical.
Place the magnetic face of the gauge onto the vertical face of the spirit level and adjust the gauge thumbscrew until the gauge bubble is centred on the 0° mark.
 - b. Use a known true vertical surface to place the gauge against and adjust the bubble to zero.
- NOTE:** You must have a flat machined surface at 90° to the spindle in order to use this gauge. If using the brake discs ensure there are no ridges and that the discs have even wear. Preferably use new discs.
- 3.1 To Check Camber With Wheels On.**
- 3.1.1 Ensure your vehicle is parked on a flat level surface, the tyres are inflated to the correct pressure and the rear wheels are chocked.
 - 3.1.2 Having removed any wheel trims, place a straight bar across two flats of the wheel trying to keep as close to the 6 o'clock position as possible (Fig. 1). Ensure the wheel has no dents where you are placing the bar.

Fig. 1

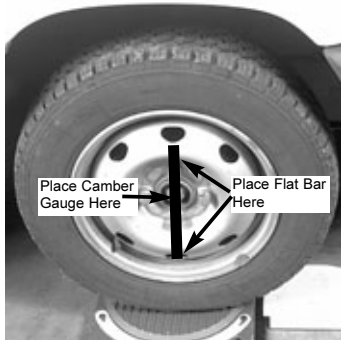


Fig. 2



3.1.3 Place the gauge in the centre of the bar and note the reading on the camber gauge bubble, this will be your camber angle.

3.1.4 Repeat the procedure for the opposite wheel.

NOTE: Always read the centre of the bubble.

NOTE: On some vehicles you will be able to attach the gauge directly to the wheel hub, this is the preferred method (Fig. 2).

NOTE: Try to simulate normal running conditions, i.e. half a tank of fuel and a weight similar to the driver in the front seat.

3.2 Measuring The Camber Angle With The Wheels Off

NOTE: The car sills must be close to the same height as they would be with the wheels on and the wishbone must be exactly the same height as it would be with the wheels on.

3.2.1 Having got the vehicle to a position where the wheels have been removed and the sills are at the same height that they would be with the wheels on (ensuring adequate steps have been taken to secure the vehicle, axle stands etc), use a jack to carefully raise the wishbone to the same height as it was with the wheels on.

3.2.2 When the wishbones are at the correct height, simply use the magnetic base on the camber gauge to attach it to the brake disc.

3.2.3 Ensure the hubs are in the dead ahead position and take the reading from the centre of the camber gauge bubble. This is your camber angle.

3.2.4 Repeat the above operation for the other hub.

NOTE: Refer to the owner's handbook before making any adjustments.

4. MEASURING CASTER ANGLE

4.1 To Check Castor

4.1.1 Use the same setup procedures as outlined above for camber angles.

4.1.2 Turn the wheels 20° from dead ahead, the wheel you will measure will be the wheel that has the front of the tyre facing away from the car.

4.1.3 Place the gauge against the wheel again using a level surface at 90° to the wheel spindle and adjust the bubble so that it is bisected by the zero° mark.

4.1.4 Turn the wheels 20° the other way (a total of 40°).

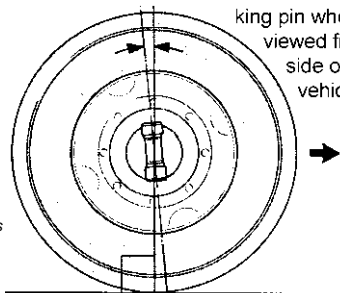
4.1.5 Take a reading, and this will be your castor angle.

NOTE: When taking measurements ensure the gauge is level (the bubble vial uppermost).

NOTE: Any adjustments you make to either castor or camber angles may affect the other, so re-check all measurements after any adjustments have been made.

We recommend the use of turntables Model No. GA44 when checking the caster as this will enable you to accurately set the wheels at 20°

CASTOR ANGLE is the angle between the vertical and the inclination of the king pin when viewed from side of vehicle.



NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

IMPORTANT: No liability is accepted for incorrect use of this product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

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