



# MAGNETIC CAMBER/CASTOR GAUGE 2PC

MODEL NO: **GA47**

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 AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



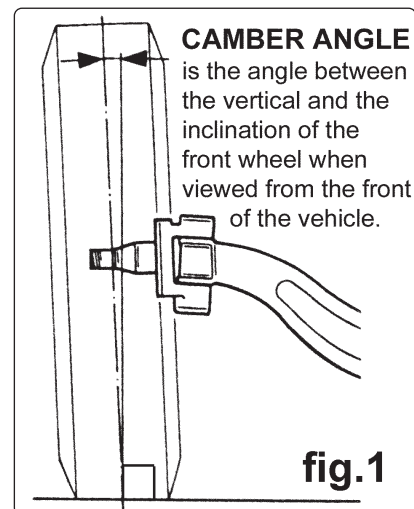
Refer to instructions

## 1. SAFETY

- 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.
- 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

Measures camber and caster angle for accurate vehicle setup. The magnetic mounting gauge attaches firmly to the hub or brake disc for reliable readings. Large adjuster knob enables quick bubble setting during caster checks. Clearly marked scale supports precise camber and caster adjustment. Graduated from  $-6^{\circ}$  to  $+6^{\circ}$  for versatile workshop use.



## 3. SPECIFICATION

Model No:.....**GA47**  
Adjustment: .....  $+6^{\circ}$  to  $-6^{\circ}$   
Nett Weight: .....0.35Kg

## 4. 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  $0^{\circ}$  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  $90^{\circ}$  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.

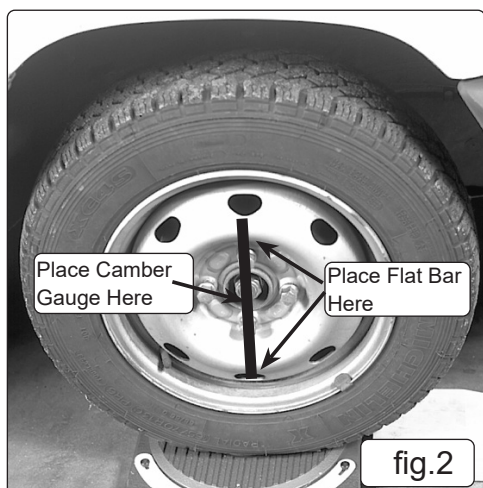
### 4.1. TO CHECK CAMBER WITH WHEELS ON.

4.1.1. Ensure the vehicle is parked on a flat, level surface, tyres inflated correctly, and rear wheels securely chocked.

4.1.2. Remove any wheel trims.

Place a straight bar across two flats of the wheel, keeping as close as possible to the 6 o'clock position (fig.1).

Ensure the wheel has no dents where the bar contacts it.



## 4.2. USING BOTH SPIRIT VIALS

- 4.2.1. Place the camber gauge in the centre of the straight bar.
- 4.2.2. First, use the levelling spirit level (the horizontal reference vial) to ensure the gauge body is vertical.
- 4.2.3. Adjust the bar position slightly until the levelling vial is centred.
- 4.2.4. This sets the gauge to a true vertical reference.
- 4.2.5. Then read the camber spirit level vial (the graduated vial).
- 4.2.6. The location of the bubble in this vial is your camber angle.
- 4.2.7. 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). This is the preferred method, and the same two-vial procedure applies:

1. Level the gauge using the levelling vial, then read camber from the camber vial.

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

## 4.3. MEASURING THE CAMBER ANGLE WITH THE WHEELS OFF

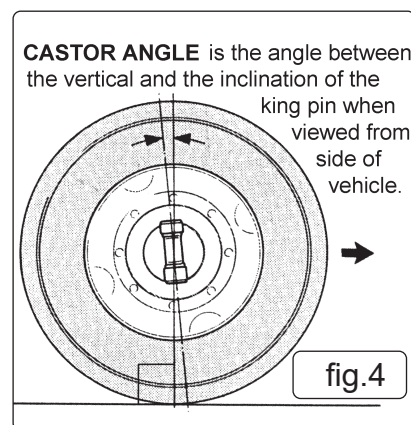
**NOTE:** The car sills must be at approximately the same height as they would be with the wheels fitted, and the wishbone must be raised to match its running height.

- 4.3.1. With the vehicle safely raised (axle stands, etc.), use a jack to carefully raise the wishbone to the same height it would be under normal load.
- 4.3.2. Attach the gauge magnetically to the brake disc.
- 4.3.3. Ensure the hub is in the dead-ahead position.
- 4.3.4. Adjust the gauge using the levelling vial until the gauge body is perfectly vertical.
- 4.3.5. Read the camber angle from the camber vial.
- 4.3.6. Repeat on the other hub.

## 5. MEASURING CASTER ANGLE

### 5.1. TO CHECK CASTOR

- 5.1.1. Use the same setup procedures as outlined above for camber angles.
- 5.1.2. Turn the wheels 20° from dead ahead. The wheel you measure is the one with the front of the tyre pointing outward from the vehicle.
- 5.1.3. Place the gauge against the wheel using a flat, vertical surface close to 90° to the wheel spindle. First, ensure the gauge is vertical using the levelling vial. Adjust the bubble so the zero° mark dissects the bubble. This sets your starting reference for caster measurement.
- 5.1.4. Turn the wheels 20° in the opposite direction (a total sweep of 40°).
- 5.1.5. Take a reading, and this will be your castor angle.
- 5.1.6. **NOTE:** When taking measurements ensure the gauge is level (the bubble vial uppermost).
- 5.1.7. **NOTE:** Any adjustments you make to either castor or camber angles may affect the other, so recheck all measurements after any adjustments have been made.
- 5.1.8. 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°.



**ENVIRONMENT PROTECTION**

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



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PURCHASE HERE

**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 is required for any claim.

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