

33–155 Checking of cross yoke

Data

Distance between both cross yoke supporting tubes (Measured at outside diameters)		855 ± 1.5
Distance between both control arm bearing brackets (Measured at center bores of measuring rods)	front	650 ± 2
	rear	658 ± 2
Tilt angle of both cross yoke supporting tubes toward each other		0° ± 40'
Tilt angle of control arm bearing brackets (Measured at outside diameters of spacing members)		2° 45' ± 40'
Distance of control arm bearing brackets in relation to cross yoke bearing tubes (Measured from outside diameters of spacing members in bearing center to outside diameters of cross yoke bearing tubes)		168 ± 1.5

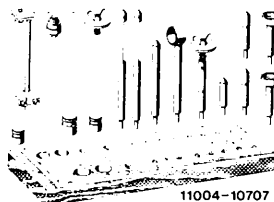
Special tools

Measuring device and measuring bolts
for cross yoke



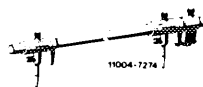
116 589 04 31 00

Measuring bolt with point, length 82 mm
(2 each) from measuring device set



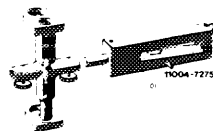
116 589 11 63 00

Beam compass, measuring length 1,500 mm



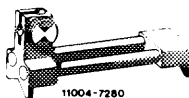
000 589 35 19 00

Spirit level carrier, measuring range 0° to 5°



001 589 33 21 01¹⁾

V-block for spirit level carrier

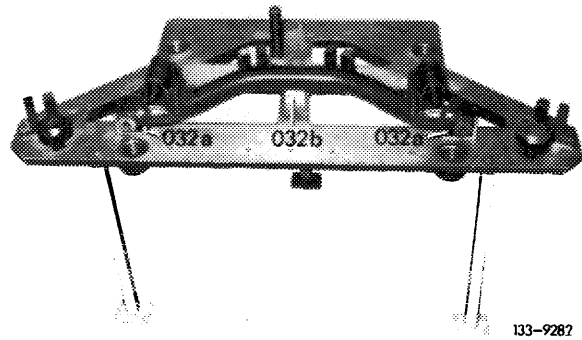


116 589 15 63 00

¹⁾ Spirit level carrier is a component of caster measuring instrument 001 589 33 21 00

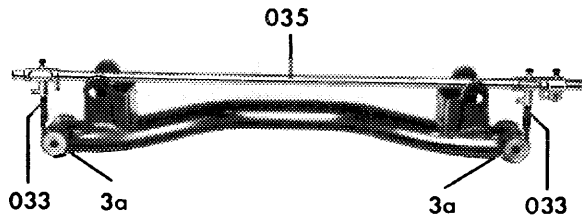
Note

Check cross yoke on a level surface. If the checking device for axle beams 115 589 04 23 00 is available, the measuring devices for cross yoke can be placed on this checking device.



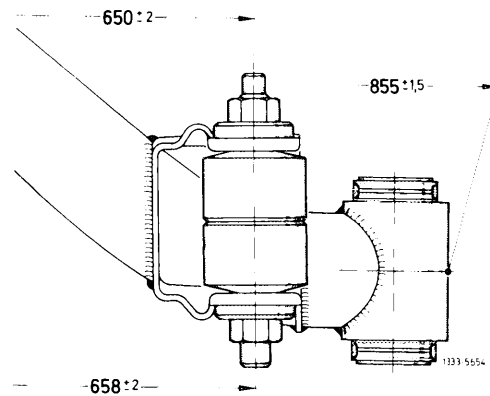
032a Measuring devices
032b Wooden wedge

1 Measure distance of both cross yoke bearing tubes with beam compass and two measuring points.

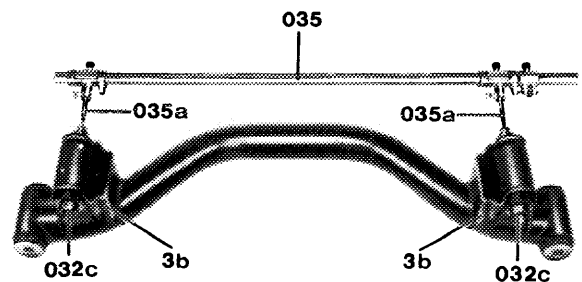


3a Cross yoke bearing tubes
033 Measuring points
035 Beam compass

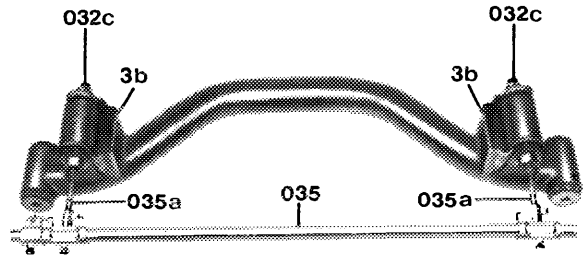
2 Screw measuring bolt with spacing members into both control arm bearing brackets.



3 Measure distance of both control arm bearing brackets front and rear on centering bores of measuring bolt with beam compass and pertinent measuring points.



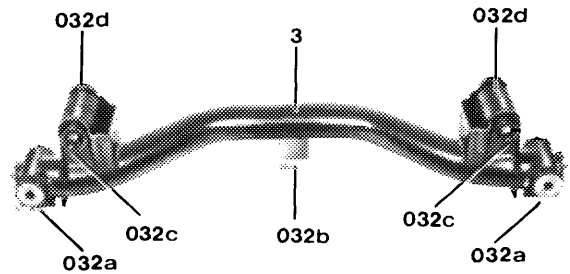
3b Control arm bearing brackets
032c Measuring bolts
035 Beam compass
035a Measuring points (standard version)



- 3b Control arm bearing brackets
- 032c Measuring bolts
- 035 Beam compass
- 035a Measuring points (standard version)

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4 Place cross yoke on measuring devices and slip wooden wedge in center underneath cross yoke.

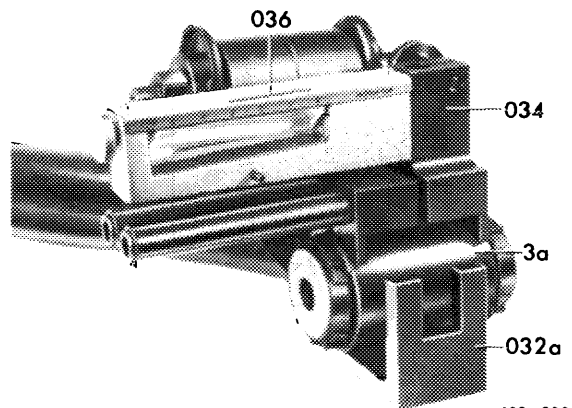


- 3 Cross yoke
- 032a Measuring devices
- 032b Wooden wedge
- 032c Measuring bolts with hex. nuts
- 032d Spacing members

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5 Measure tilt angle of one cross yoke bearing tube by placing V-block with spirit level carrier on OD of cross yoke bearing tube and adjust to 0° by displacing wooden wedge.

6 Measure tilt angle of other cross yoke bearing tube, while placing spirit level carrier in plus or minus direction depending on measured value.



- 3a Cross yoke bearing tube
- 032a Measuring device
- 034 V-block
- 036 Spirit level carrier

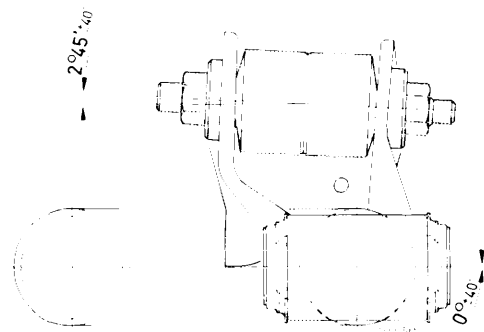
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Note: When held in driving direction (refer to arrow), spirit level indicates plus. When held opposite to driving direction, spirit level indicates minus.

7 Average both cross yoke bearing tubes by shifting wooden wedge as required.

Example:

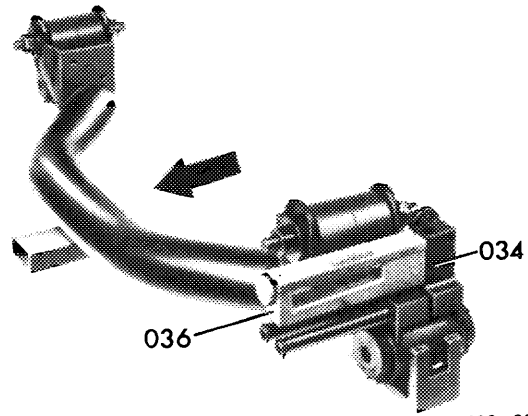
Tilt angle of lefthand cross yoke bearing tube: 0°
 Tilt angle of righthand cross yoke bearing tube: $+0^{\circ} 20'$



Move wooden wedge in such a manner that tilt angle of lefthand cross yoke bearing tube is
 and tilt angle of righthand cross yoke bearing tube is

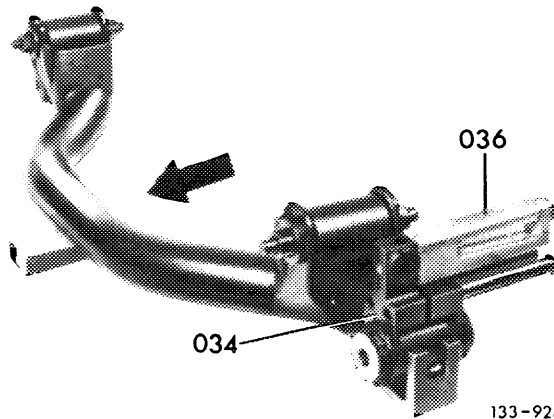
- 0° 10'

+ 0° 10'



034 V-block
 036 Spirit level carrier

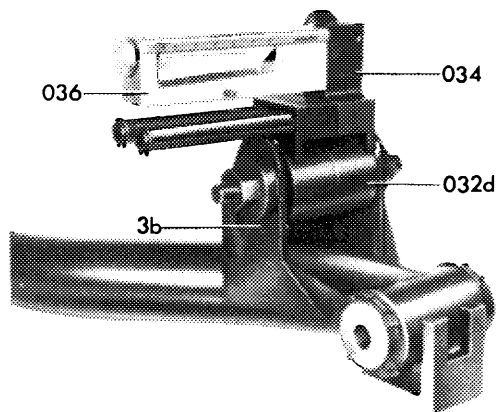
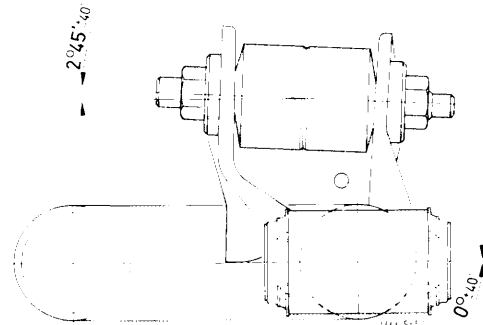
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034 V-block
 036 Spirit level carrier

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8 Measure tilt angle of lefthand and righthand control arm bearing bracket by mounting V-block with spirit level carrier on spacing members.



3b Control arm bearing bracket
 032d Spacing member
 034 V-block
 036 Spirit level carrier

133-9284

9 Check distance of control arm bearing brackets in relation to cross yoke bearing tubes on OD's. Here, the slide rule should rest against the side of measuring device located in driving direction.

- 3a Cross yoke bearing tube
- 3b Control arm bearing bracket
- 032a Measuring device
- 032d Spacing member

