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Wheels and Tires

SPECIFICATIONS

6.76

320 i A

320 i

Road Wheels¹⁾

Rim size (well base rims)	mm (in.)	disk wheels
Max. radial rim runout	mm (in.)	5 1/2 J x 13 H2 - B steel rims
Max. lateral rim runout	mm (in.)	1.0 (0.040)
Max. static unbalance	gcm	1.0 (0.040)
Bolt locating diameter	mm (in.)	300
Approved suppliers		100.0 (3.937)
		Kronprinz, Lemmerz, Südrad

Tires²⁾

Radial ply tires (tubeless with rubber valve 43 GS/11.5 DIN 7780)	mm (in.)	185/70 HR 13
Max. radial tire runout (tire mounted on rim)	mm (in.)	2.0 (0.080)
Max. lateral tire runout (tire mounted on rim)	mm (in.)	2.0 (0.080)
Rolling circumference	mm (in.)	1833 (72.165) ³⁾
Max. dynamic unbalance per wheel (balance weights as required, max. balance weight per side 90 grams. If unbalance is greater, mount tire on rim offset. Use one balance weight up to 70 grams or two balance weights for more than 70 grams of unbalance)	gcm	180

- 1) Use same make rims for both axles and spare wheel.
- 2) Use same make tires for both axles and spare wheel. If tires run in one direction only, note mounting instructions and "outside" or "inside" marks. Note any possible codes, i.e. avoid mixed installations of tires with and without codes.
- 3) 1810 ± 36 mm (71.260 ± 1.417") for Continental TS 772.

Model

320 i

320 i A

Approved Tires

Steel radial ply tires

Continental TS 772, Michelin XVS

1)2)

Tire Pressures

Loads up to

4 persons

bar (psi)

Front

1.9 (27)

Rear

1.9 (27)

5 persons and luggage

bar (psi)

2.0 (28)

2.1 (30)

1) 0.3 bar (4 psi) more for warm tires.

2) Snow radial ply tires 185/70 SR 13 or 185/70 HR 13 have same tire pressures as normal tires of same size.

Torque Specifications in Nm / kpm (ft. lbs.)

Wheel bolts 81 ... 90 / 8.1 ... 9.0 (59 ... 65)

36 10 008 ELECTRONIC BALANCING OF FRONT WHEEL ON CAR

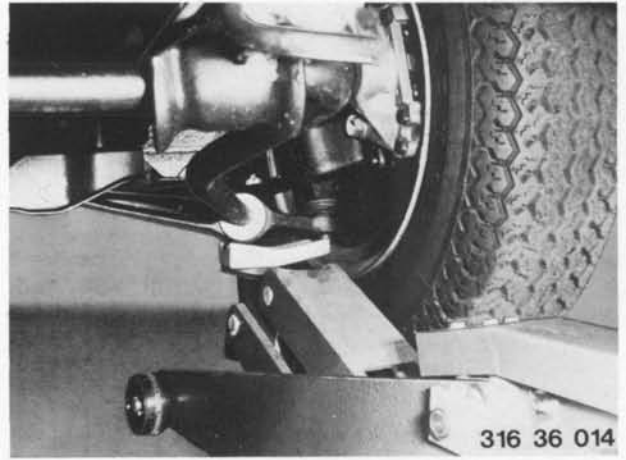
Check front wheel's radial and lateral runout - 36 10 209.

Wheel bearing play must be correct.

Remove old balance weights, stones in treads and large pieces of dirt.

Place measuring stand on control arm as close as possible to wheel.

Lift car with measuring stand.



Attach adhesive tape to wheel at level of stroboscope lamp.

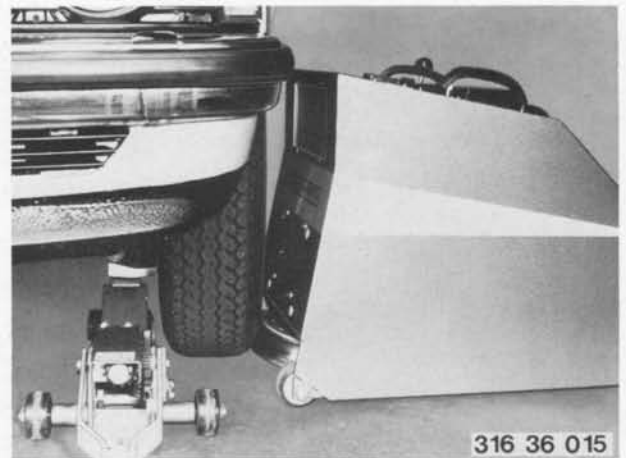


Balance wheel according to instructions supplied with pertinent balancing equipment.

a) Steel rims: Use one balance weight for up to 70 and two balance weights for more than 70 grams of unbalance.

b) Aluminum rims: Use only one balance weight for up to 90 grams of unbalance.

Note maximum unbalance per wheel and side ¹⁾.



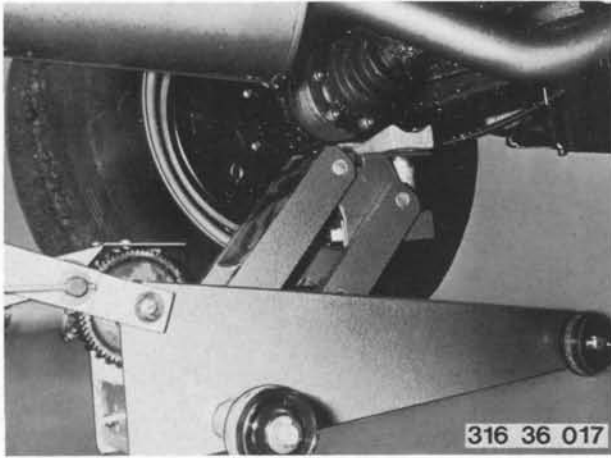
If there is still unbalance (uneasy steering wheel), mount dynamic balancing sensor on measuring stand and place on caliper.

Balance wheel according to instructions supplied with pertinent balancing equipment.



1) See Specifications

36 10 058 ELECTRONIC BALANCING OF REAR WHEEL ON CAR

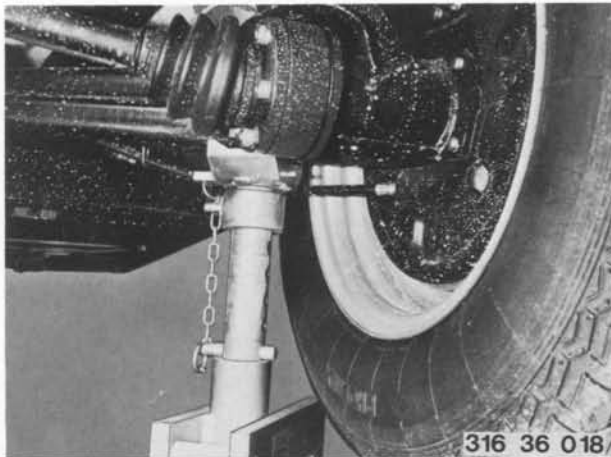


Check rear wheel's radial and lateral runout - 36 10 209.

Remove old balance weights, stones in treads and large pieces of dirt. Place measuring stand on trailing arm as close as possible to wheel.

Output shaft must turn freely.

Lift car with measuring stand.



Lift car on opposite side and place a support underneath trailing arm.

Attach adhesive tape on wheel to be balanced at level of stroboscope lamp.



Accelerate rear wheel to 110 KPH (70 MPH) with engine (don't apply any type of wheel drive). Balance wheel according to instructions supplied with pertinent balancing equipment.

a) Steel rims: Use one balance weight for up to 70 and two balance weights for more than 70 grams of unbalance.

b) Aluminum rims: Use only one balance weight for up to 90 grams of unbalance.

Note maximum unbalance per wheel and side ¹⁾.



Detach output shaft at rear wheel for dynamic balancing.

Place sensor on brake anchor plate at center of axle.

Sensor must be horizontal and perpendicular.

Turn rear wheel for balancing with a wheel driver.

Note! Balance wheel according to instructions supplied with pertinent balancing equipment.

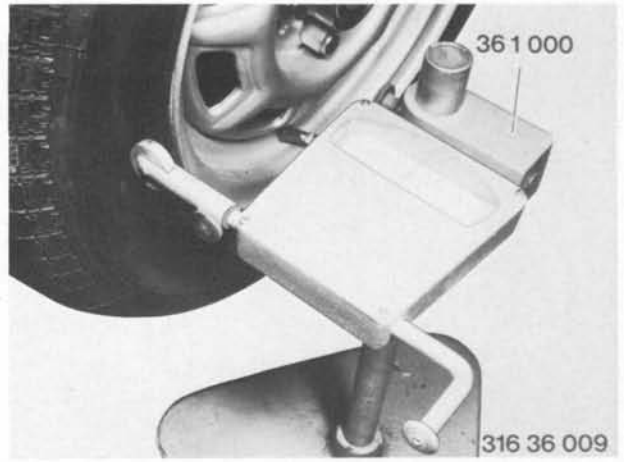
1) See Specifications

36 10 209 CHECKING RADIAL AND LATERAL WHEEL RUNOUT

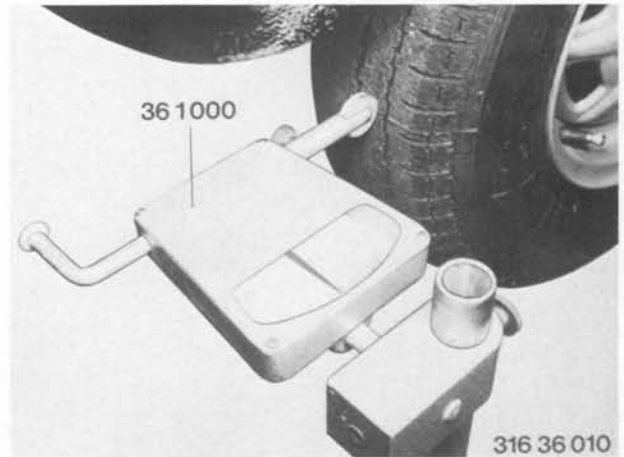
Wheel bearing play must be correct.

Lift car.

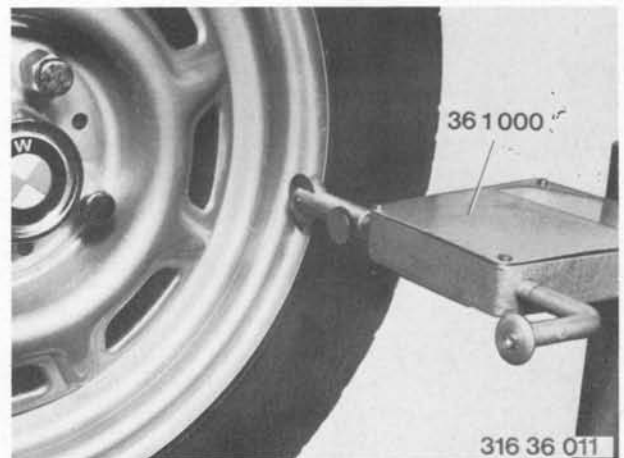
Check wheel's lateral runout¹⁾ with Special Tool 36 1 000.



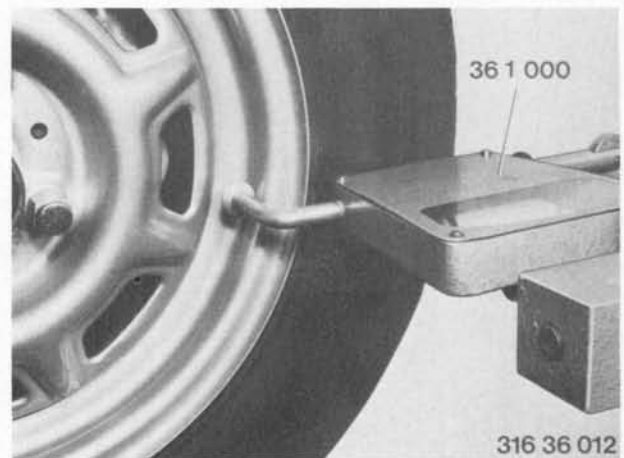
Check wheel's radial runout¹⁾ with Special Tool 36 1 000.



Check rim's lateral runout¹⁾ with Special Tool 36 1 000.



Check rim's radial runout¹⁾ with Special Tool 36 1 000.



1) See Specifications



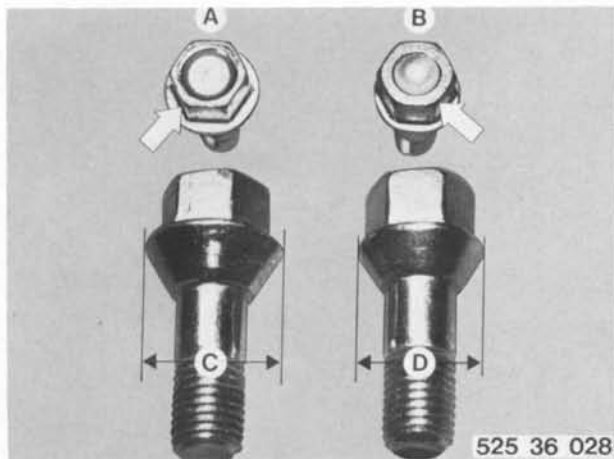
36 10 300 REMOVING AND INSTALLING FRONT WHEEL

36 10 320 REMOVING AND INSTALLING REAR WHEEL

Loosen wheel nuts or wheel bolts.

Caution! Wheel is electronically balanced. Mark wheel to hub position before removing.

Installation Note! Tighten to specified torque¹⁾. Lubricate wheel bolts slightly before installing.



Important!

Wheel bolts A = aluminum rims

Wheel bolts B = steel rims

External marks:

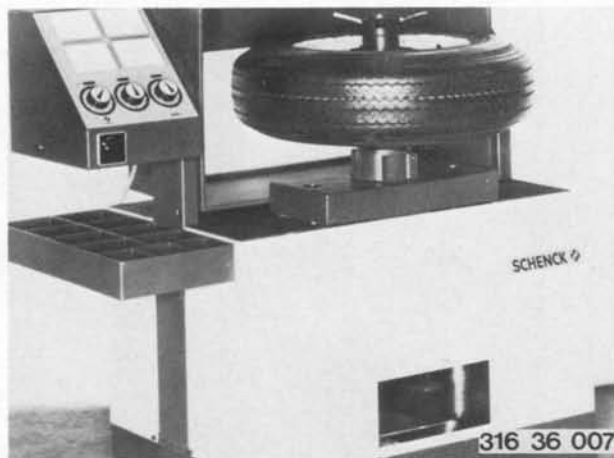
Cylindrical milling on wheel bolts A.

Spherical milling on wheel bolts B.

Taper diameter of wheel bolts A = $C 23 + 0.5$ mm
(0.905 + 0.020")

Taper diameter of wheel bolts B = $D 21 + 0.5$ mm
(0.827 + 0.020")

Wheel bolts for steel rims cannot be applied to aluminum rims.



36 10 508 STATIC AND DYNAMIC STATIONARY BALANCING OF WHEEL

- Wheel Removed -

Remove old balance weights, stones in treads and large pieces of dirt.

Balance wheel according to instructions supplied with balancing equipment.



Arrangement of balance weights (knock-in weights) on steel rims.

Use one balance weight for up to 70 and two balance weights for more than 70 grams of unbalance.

Note maximum unbalance per wheel and side. 1)

1) See Specifications

Arrangement of balance weights on aluminum rims.

1 = Balance weight

2 = Spring retainer

Use only one balance weight for up to 90 grams of unbalance.

Note maximum unbalance per wheel and side¹⁾.



1) See Specifications