### 2012 MINI Cooper

SUSPENSION Wheel and Tire System

Turn wheel by hand and measure max. **RADIAL TIRE RUNOUT**.

NOTE: Measuring device must be vertical to tire tread.

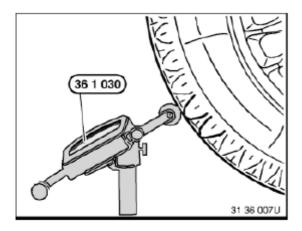


Fig. 13: Measuring Max Radial Tire Runout Using Special Tool (36 1 030) Courtesy of BMW OF NORTH AMERICA, INC.

Position special tool 36 1 030 on tire side wall.

Turn wheel by hand and measure max. **LATERAL TIRE RUNOUT**.

NOTE: Measuring device must be vertical to tire side wall.

Never measure on printed text on tire!

If necessary, check disc wheel (rim) for **RADIAL AND FACE RUNOUT**.

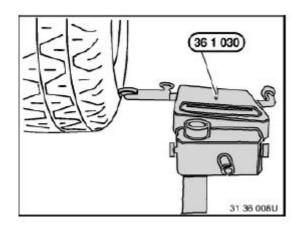


Fig. 14: Measuring Max Lateral Tire Runout Using Special Tool (36 1 030) Courtesy of BMW OF NORTH AMERICA, INC.

36 10 715 CHECKING RIM FOR FACE AND RADIAL RUNOUT

#### 2012 MINI Cooper

SUSPENSION Wheel and Tire System

# **Necessary preliminary tasks:**

- Remove WHEEL
- Check front and rear wheel for **FACE AND LATERAL RUNOUT**
- Pull tire off rim
- Remove fitted balance weights
- Remove dirt from rim well and rim flange

# IMPORTANT: Disc wheels must not be repaired!

Mount disc wheel in balancing machine.

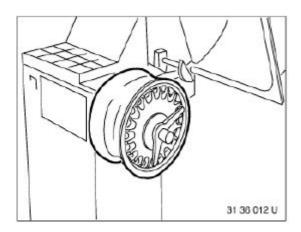


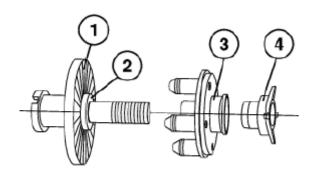
Fig. 15: Identifying Wheel Disc On Wheel Balancing Machine Courtesy of BMW OF NORTH AMERICA, INC.

Use suitable wheel centering element supplied with corresponding balancing machine.

- 1. Basic flange
- 2. Wheel centering element
- 3. Type flange
- 4. Clamping nut

### 2012 MINI Cooper

SUSPENSION Wheel and Tire System



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Fig. 16: Identifying Basic Flange, Wheel Centering Element, Type Flange And Clamping Nut
Courtesy of BMW OF NORTH AMERICA, INC.

Place dial gauge sensor on rim shoulder.

Turn wheel by hand and measure max. **RADIAL RUNOUT**.

Carry out measurement on both rim shoulder sides.

NOTE: Dial gauge must be vertical to rim shoulder.

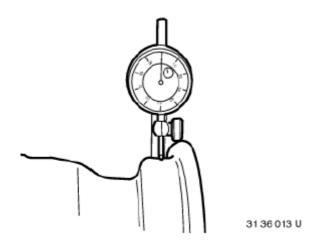


Fig. 17: Identifying Dial Gauge Sensor On Rim Shoulder Courtesy of BMW OF NORTH AMERICA, INC.

Position sensor on rim flange.

Turn wheel by hand and measure max. LATERAL RUNOUT.

Carry out measurement on both rim flanges.

NOTE: Dial gauge must be vertical to rim flange.

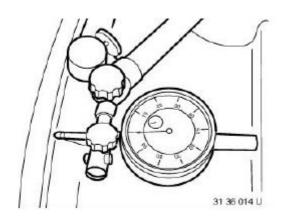


Fig. 18: Measuring Wheel Max. Lateral Runout Using Dial Gauge Sensor Courtesy of BMW OF NORTH AMERICA, INC.

IMPORTANT: Avoid transformation errors during subsequent installation tasks. See <u>STATIONARY WHEEL</u> BALANCING.

36 10 300 REMOVING OR INSTALLING FRONT OR REAR WHEEL

### **Special tools required:**

- 36 1 250
- 36 1 300

IMPORTANT: Wheel was balanced electronically.

Follow instructions on **INITIALIZING TIRE DEFECT INDICATOR (RPA)**.

Observe the following procedure to prevent shift errors and imbalance:

- o Loosen wheel bolts.
- o The wheel is positioned such that the valve is at the bottom.
- o If several wheels are removed simultaneously, mark with a piece of chalk on each tire the axle and side on which the corresponding wheel is fitted.
- o Mark alignment of wheel with respect to wheel hub.
- o Mark position of lockable wheel bolt.
- o Release wheel bolts and remove wheel.