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Replacing a run-flat tyre version or UHP tyres*Note:*

UHP tyre = Ultra High Performance tyre

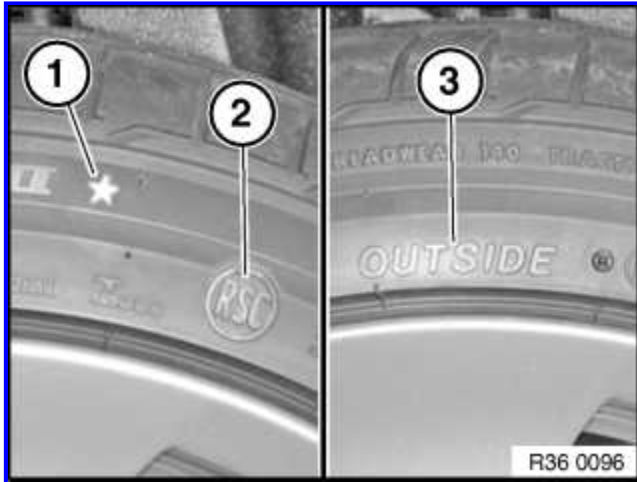
UHP tyres are tyres with an aspect ratio (H:B) $\leq 45\%$ or tyres with a speed index $\geq$ "V"*Note:*

Follow the tyre fitting machine manufacturer's operating instructions.

It is absolutely essential to ensure that the equipment is in proper working condition and that there is no damage to the disc wheel and tyre.

Balance [wheels](#) after completing work.**Important!****For installation and removal work on run-flat tyres and/or on certified and approved installation equipment, the following successful training for the "Certified BMW tyre fitter" is required! (See BMW training programme)****Only approved and certified tyre fitting machines may be used for installing run-flat tyres and/or UHP tyres!****Please refer to the operating instructions of the respective tyre fitting machine for details of the exact fitting procedure.****Use only BMW-approved plastic-covered mounting levers!****Use only BMW-approved tyre-fitting paste.**

For approved wheel and tyre combinations, tyre makes and optional equipment, refer to KSD CD.



Note:

Pay attention to different tyre markings:

- **Position (1)** Identification of BMW-approved tyres. Ensure that only BMW-approved tyres are fitted.
- **Item (2)** RSC is the abbreviation for **R**un-flat **S**ystem **C**omponent (run-flat tyres).
- **Item (3)** Outside. The tyre must be fitted so that the wording Outside is always situated on the outside of the rim.

Important!

Many tyres are directional!

The arrow on the tyre must point in the "Forward" direction of rotation!



Important!

Before removal:

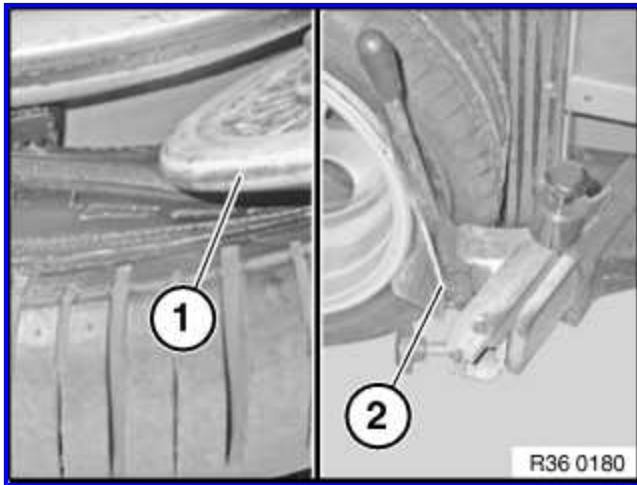
- Observe tyre temperature of min. +15 °C. Refer to [Recommendation for heating](#).
- Clean wheel/tyre unit
- Remove valve insert (deflate tyre)
- Remove fitted balancing weights

Dismantling of top tyre bead:

Press off tyre bead from rim flange as much as possible with unseating roller (1).

Note position of sensor - do not unseat in this area!

If using a pressing-off tool (2), unseat 3 to 4 times around circumference max. 1 cm from rim flange.



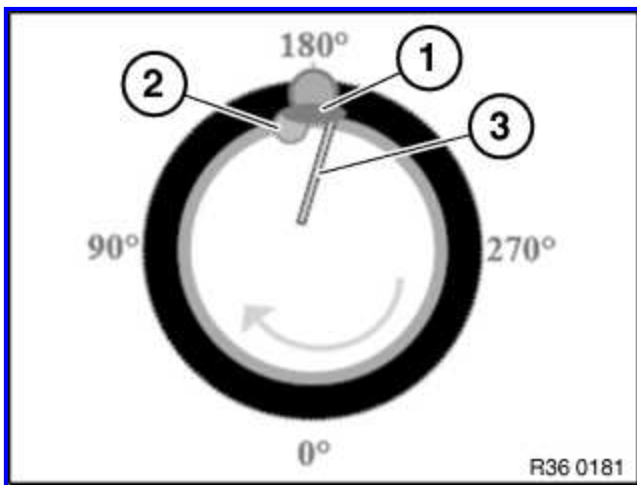
Observe pressing-off/unseating limitation.

Start at 90° or 270°.

Do not position at 0° or 180° Refer to following Fig. no. 3601--81.



Apply sufficient [lubricant](#) as deeply as possible between wheel rim and tyre.



Position mounting head (1) in direction of rotation before valve (2).

Position hold-down device at 0° to stop tyre in wheel drop centre.

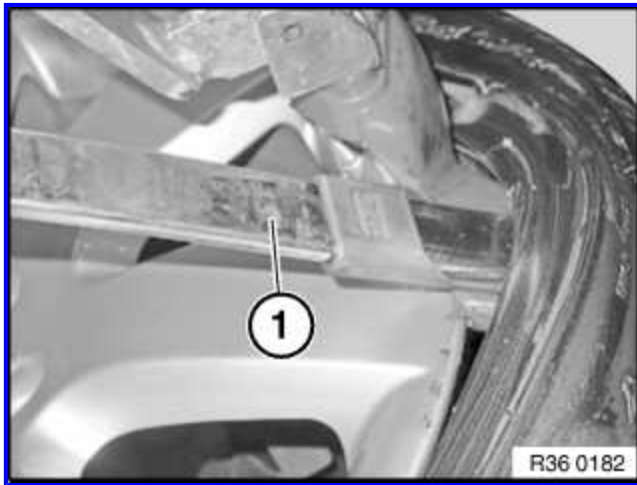
Position tyre iron (3) on fitting head.

Lever tyre bead (1) over rim flange with mounting lever.

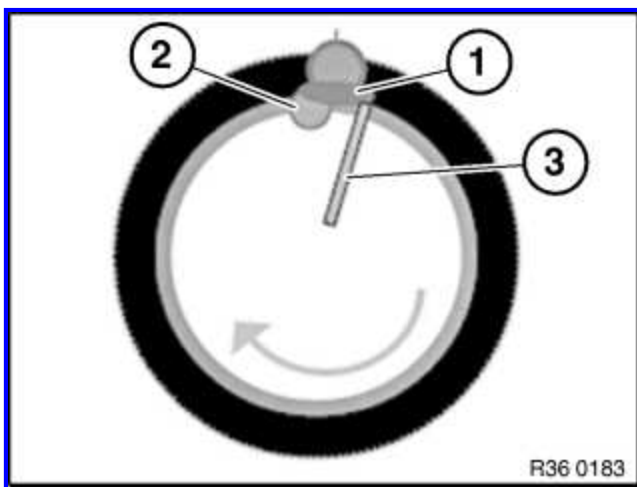
Important!

Avoid damaging the wheel rim by using a suitable mounting lever with protective coating.

Make sure there is sufficient lubrication between tyre bead and rim flange, apply [lubricant](#) if necessary!



Allow tyre fitting machine to rotate slowly, and relieve tension on hold-down device and rollers during rotation.



Dismantling of bottom tyre bead:

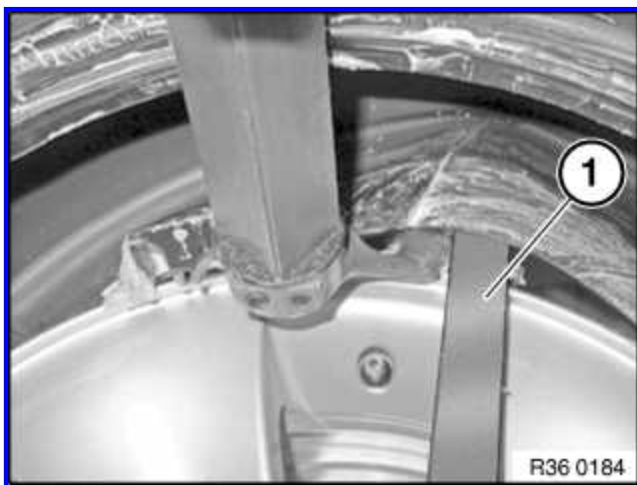
Important!

Apply sufficient [lubricant](#) between wheel rim and tyre.

Position mounting head (1) in direction of rotation before sensor (2).

Position mounting lever (3) on mounting head (1).

Tyre bead must be positioned entirely in wheel drop centre opposite mounting head (1).



Lever tyre bead (1) over rim flange with mounting lever.

Important!

Avoid damaging the wheel rim by using a suitable mounting lever with protective coating.

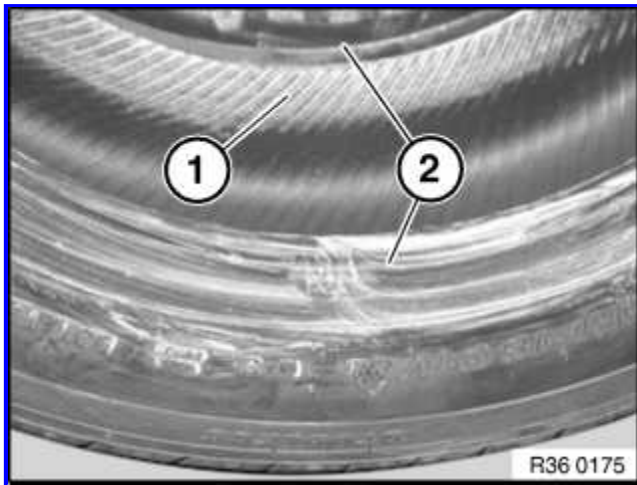
Allow fitting machine to rotate slowly.

Observe before installation:

- Observe minimum tyre air temperature of +15 °C! Refer to [Recommendation for heating](#)
- Clean wheel/tyre
- Check wheel rim for burrs, wear and other damage



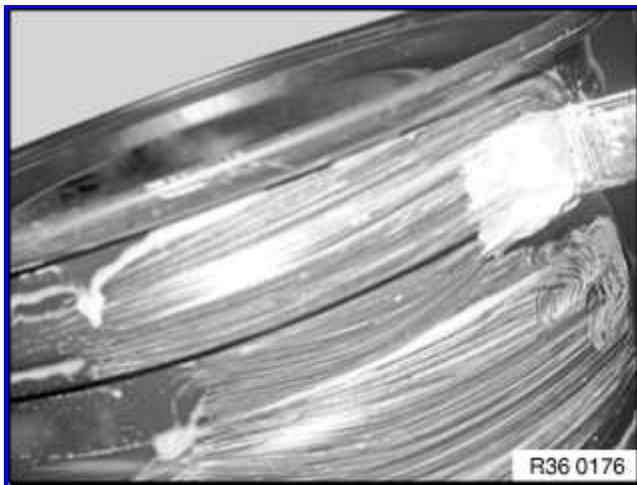
- Clean tyre beads and check for evidence of damage
- Check RDC sensor for damage
- Renew tyre valve



Before installation:

Important!

Apply [lubricant](#) to inside of top tyre bead (1) and to outside of top and bottom tyre sidewall (2) up to top decorative line!



Apply [lubricant](#) over entire well area.

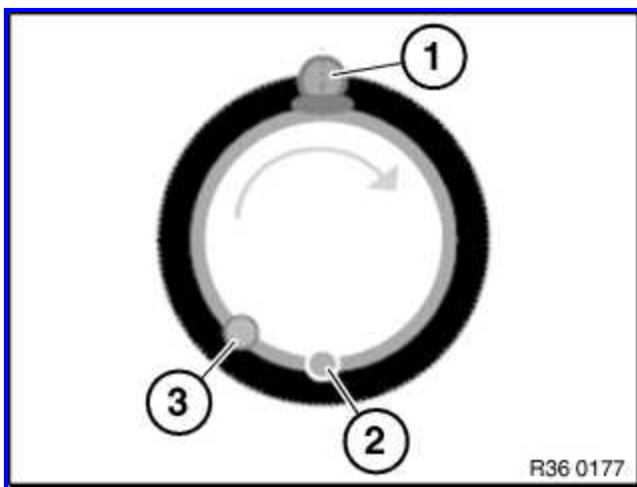
Lever sensor spare.

Installation of bottom tyre bead:

Grip wheel and lay on tyre.

Important!

Apply a light coating of [antiseize compound](#) to fitting head.



Position fitting head (1) as pictured.

Important!

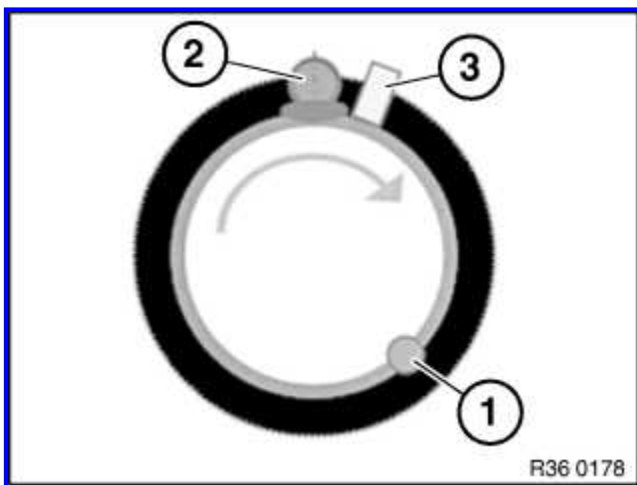
Make sure tyre is correctly positioned on fitting head.
Position tyre bead in relation to mounting head (1) in accordance with equipment manufacturer's specification.

Position sensor (RDC) (3) and valve min. 10--15 cm before traction point/catching point (2).

Sensor must not be subjected to load.

Allow fitting machine to rotate slowly.

Guide tyre in direction of rotation and press towards wheel drop centre.



Installation of top tyre bead:

Position sensor (1) in relation to mounting head (2) as pictured.

Important!

Make sure tyre is correctly positioned on fitting head.
Position tyre bead in relation to mounting head (2) in accordance with equipment manufacturer's specification.

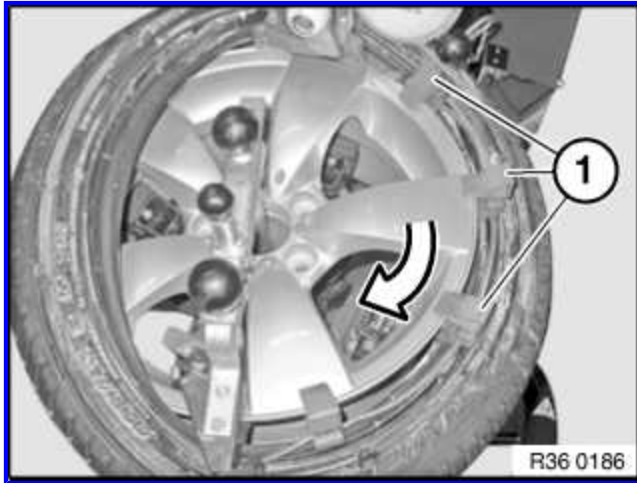
Position sensor (RDC) (1) and valve min. 10--15 cm before traction point/catching point.

Sensor must not be subjected to load.

Coat bead holding-down element (3) with [lubricant](#) and insert.

Allow fitting machine to rotate slowly.

Insert additional bead holding-down elements (1) to hold the tyre bead in wheel drop centre.



The last part of the tyre bead should jump over the rim flange in the sensor area.

Important!

Perform fitting in stages, take short breaks and relieve tension.

Avoid heavy deformations at the traction point.

Do not squash belt edge and side walls through hold-down devices.

Never use a tyre iron as a holding-down element.



Filling/inflating tyre:

Remove all fitting aids.

Important!

Possibilities for safely mounting the wheel or incorporation in inflation apparatus should be utilised!

Observe instructions/conditions of trade association.

Observe national regulations!

Inflate with air (without valve insert).

- Increase pressure up to 3.3 bar in stages (fitting pressure).
- If the tyre bead does not slip fully past the rim edge all round, do not under any circumstance increase the pressure.
- If necessary, release air and force off tyre bead again.
- Coat rim flange and tyre again with [tyre mounting paste](#).
- Inflate tyre again up to 3.3 bar.
- When tyre beads are resting perfectly on rim shoulders, increase tyre pressure to maximum 4.0 bar (settling pressure) to "settle" the tyre.

Screw in valve insert and correct the tyre pressure.

Observe notes on initialisation of the [Run Flat Indicator](#) (RPA) or RDC (USA=TPM).

Important!



Advise the customer to avoid heavy acceleration and heavy braking in the initial period.

The assembly paste can cause the tyre to turn on the wheel rim and give rise to imbalance.