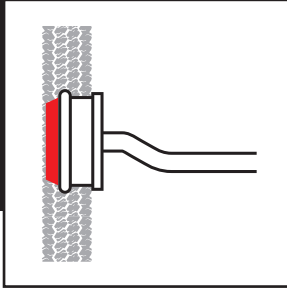




BALANCERS

Centramatic Balancers mount:

- Between the wheel and drum / hub on **INBOARD STEER** applications
- Between the wheels on **DUAL REAR** applications
- Outside of wheels on **OUTBOARD** applications



INSTALLATION INSTRUCTIONS for INBOARD STEER

WARNING

Use of gloves is recommended. **Centramatic Balancers** are manufactured using thin steel, so holes and edges may be sharp and could cause injury.

PRE-BALANCING

While pre-balancing is not required, it may be recommended by your dealer. A good computer balance can indicate a mis-mounted tyre, a defective tyre, bent wheels or other 'out-of-round' conditions. This leaves the full potential of the **Centramatic Balancer** to balance the drum, hub and quickly respond to changing conditions throughout the life of the tyre.

Do not 'strobe' or 'on-vehicle' balance while **Centramatic Balancers** are fitted. **Centramatic Balancers** do not work with this method - on jack stands, there is no deflection and the weights set up erratically under this condition.

VIBRATION

If a vibration develops after installing **Centramatic Balancers**, this normally indicates a loose wheel bearing, or possibly a mechanical problem related to the suspension or undercarriage. **Centramatic Balancers** will not automatically balance the vehicle when such problems arise.

1 Raise the vehicle or axle so that the wheel may be safely removed using proper lifting / jacking techniques as recommended by the vehicle manufacturer.

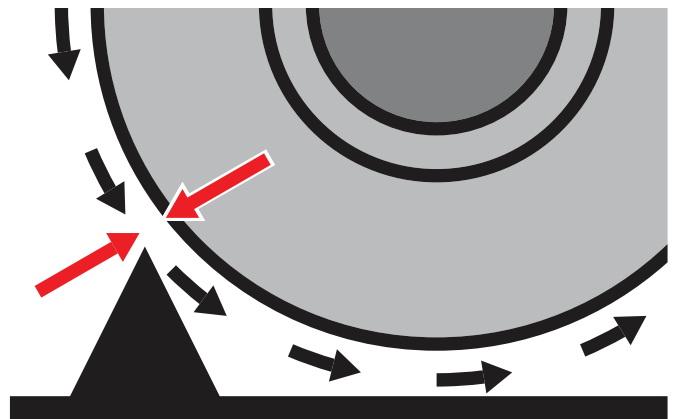
2 Before removing the wheel, note the wheel / hub position by marking the wheel stud adjacent to valve stem, or similar method.

Now **check for out-of-round** wheel condition by placing a fixed object point on the ground a few mm gap from the tyre tread by turning the wheel slowly and noting if any change in the gap occurs. 2 - 3mm is acceptable; over 3mm is unacceptable. If unacceptable, one or more of 4 problems may exist. Check and correct as necessary:

A Rim / hub pilot tolerance may be excessive.

Remount wheel using centreing sleeves.

B Rim not concentric. Move fixed object point near rim and turn wheel noting if gap changes. Replace rim if necessary.



C Tyre fitting not central on rim. Check that tyre guide rib is same distance from rim around the entire circumference of rim. 2mm deviation is acceptable. If unacceptable, refit tyre to rim after turning 180°.

D Out-of-round tyre. Use tyre truer machine to correct tyre or replace tyre. **NOTE:** No amount of balancing can correct out-of-round wheel / tyre assembly. Tyres should be re-mounted / replaced or cut round with **Tyre Truer**.

3 Remove the wheel and **examine for any irregularities or mechanical problems.**

4 **Remove old wheel weights** unless recently balanced. If balanced on-vehicle, replace wheel in same position as previously marked prior to removal. Remove any balancing material inside tyre.

5 **Set the Centramatic Balancer inside the wheel,** making sure it is centred by aligning the correct size stud holes to the rim holes and/or using the centre hole in the middle of the **Centramatic Balancer**. Now check for proper fitting, ie:

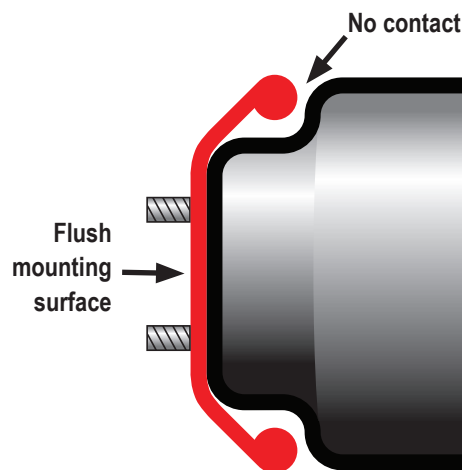
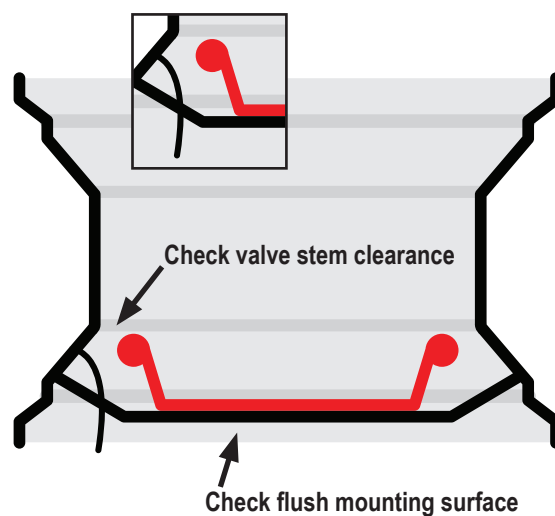
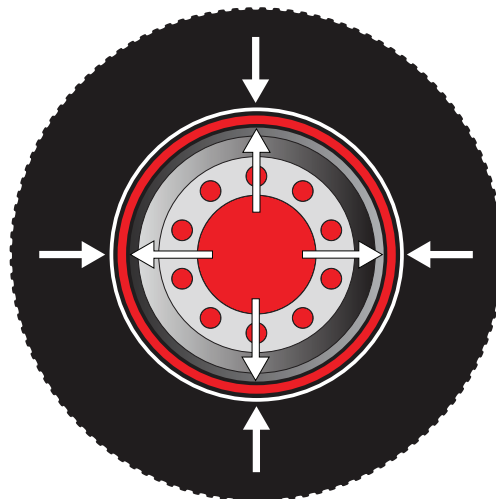
A **The flat mounting surface of Balancer is flush** to mounting surface of rim and no gaps. **Balancer** doesn't touch rim anywhere else.

B **Valve stem has clearance between Balancer.**
CAUTION: if valve stem is in contact with the **Centramatic Balancer**, a hole in the valve stem could result. If necessary, the stem should be bent only slightly - or changed / repositioned - so that there is no contact.

6 **Place the Centramatic Balancer on the hub / drum using correct size holes* as guides.** Check **Balancer** slides on all the way until the flat mounting surface of **Balancer** is flush to hub / drum mounting surface and there are no gaps or contact with hub / drum, which could cause distortion of **Balancer** when wheel is installed and tightened.
CAUTION: On vehicles with disk brakes, spin the hub one complete turn. While **Centramatic Balancer** is fitted, ensure the **Balancer** doesn't touch the brake caliper or any other brake components.

* Most **Centramatic Balancers** are made to fit more than one bolt pattern size.

7 **Reinstall the wheel** (preferably with **Centreing Sleeves**) using manufacturer's torque specifications and tightening sequence.



ANY QUESTIONS CALL:

1300 822 765
www.centramatic.com.au

