

Wheel Maintenance Process

1. EQUIPMENT REQUIRED

TO COMPLETE THE PROCESS YOU WILL NEED:

- Suitable air gun
- Suitable jack for the weight of the vehicle/trailer
- Suitable axle stands to support the weight of the vehicle/trailer
- Hand wire brush
- WD40
- Centralising collars (in correct size) (x2)
- Emery cloth
- Wheel Trolley (VMU only)
- Calibrated torque wrench

SUPPORTING DOCUMENTS

- Bandvulc or Continental Method Statement
- Service Provider Method Statement

2. WHEEL REMOVAL PROCESS

- Prior to starting the process of wheel removal always refer to the Bandvulc or Continental Method Statement
- Ensure that the work can be carried out safely, that the park brake is applied and that wheel chocks are in place
- Ensure that a suitable jack is used at the recommended jacking points and that the jack is on stable ground or spread plates are used
- Ensure the axle is supported by a suitable axle stand
- Before removing wheels/wheel nuts they should be checked for any damage (see part two for information)
- Remove the wheel nuts using a suitable air tool
- In the event of difficulty in the removal of a wheel from a hub or drum, under no circumstances should direct hammer blows be made to the wheel rim
- Ensure that a rubber mat is placed on the ground to protect the wheel from damage and scratches

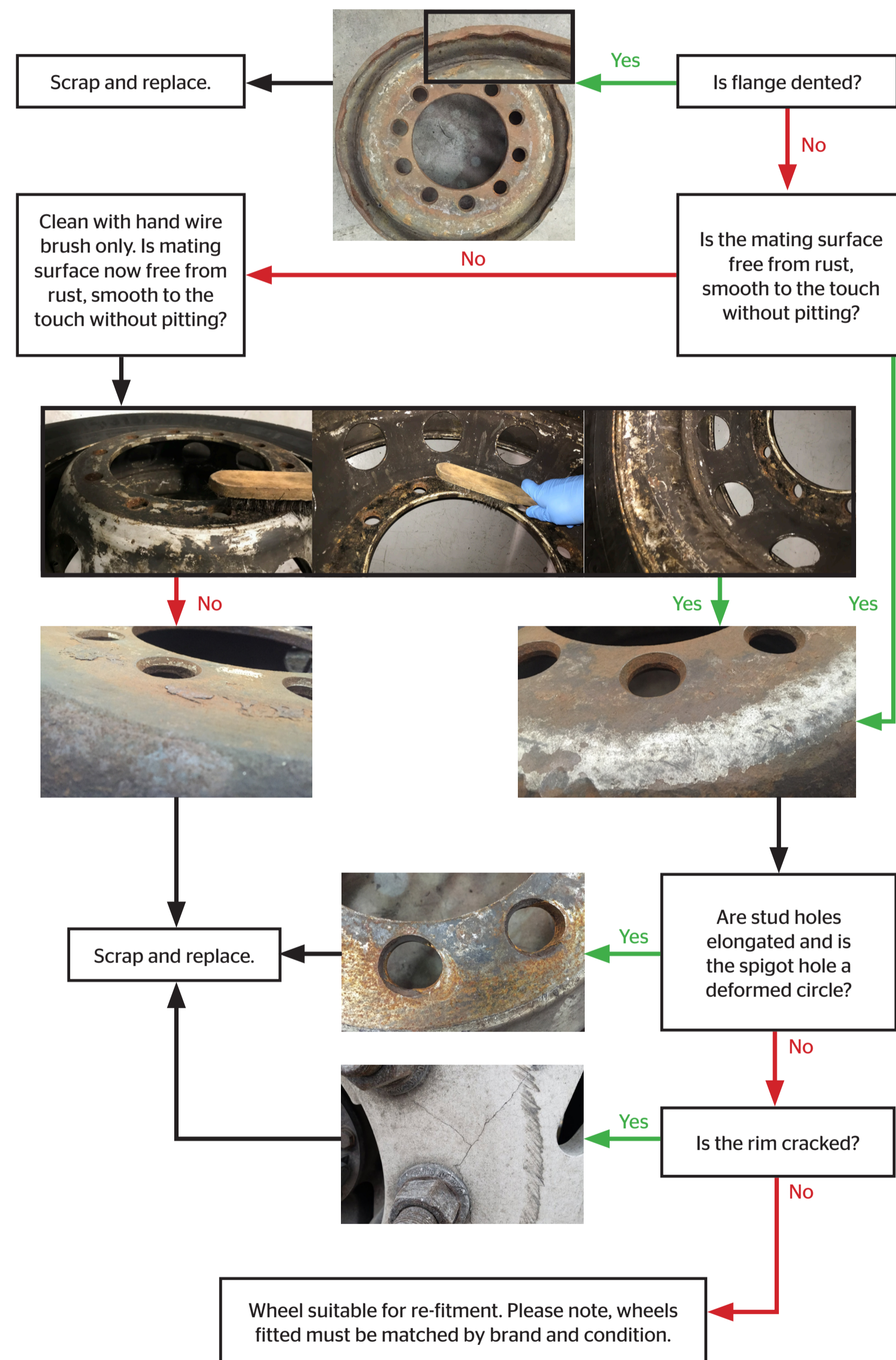
If any of the below are used in the removal of wheels, that wheel must be scrapped and a replacement fitted:

- Heat
- Porta press
- Excessive blows with a sledgehammer



3. WHEEL INSPECTION

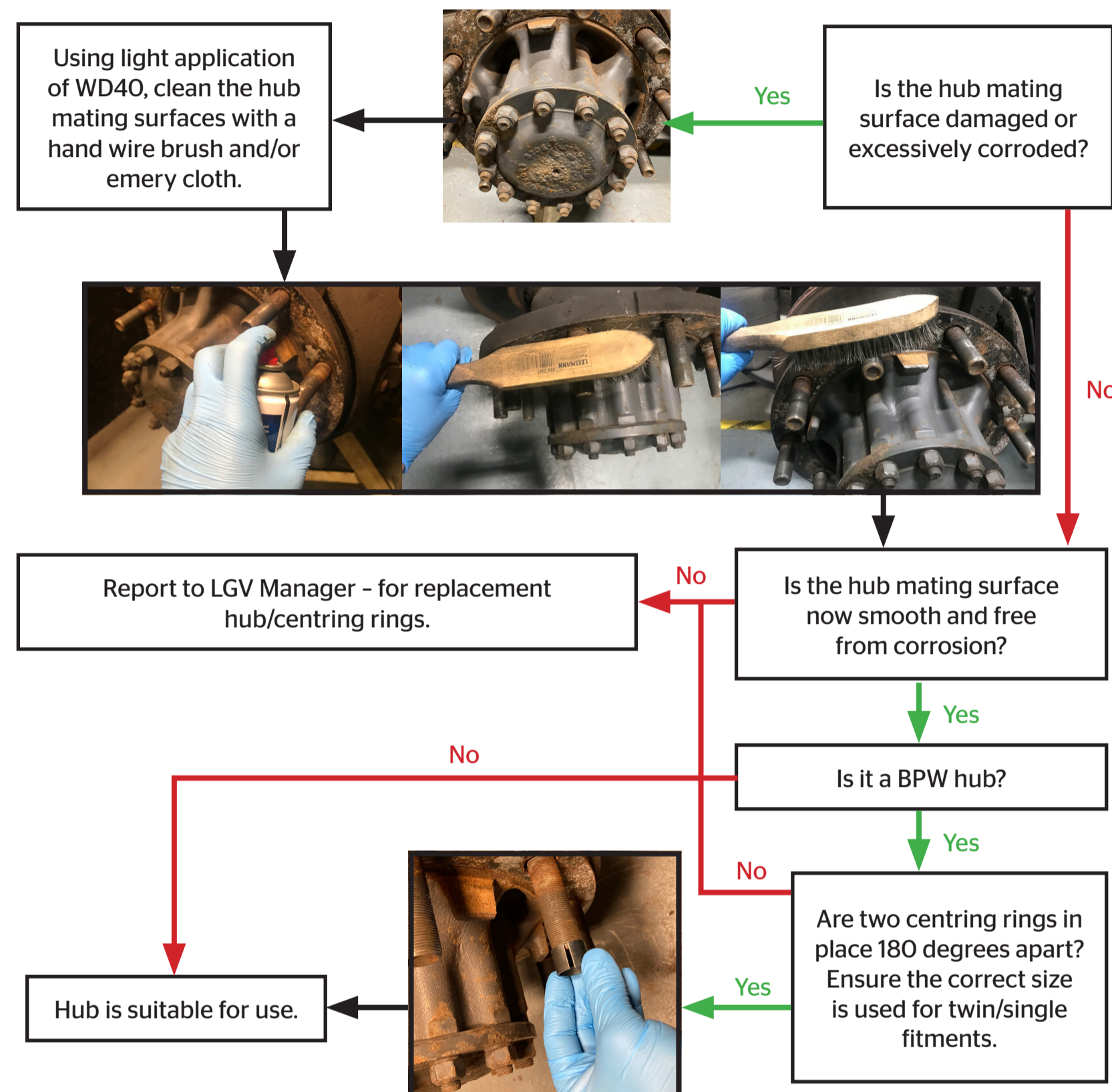
Limiting corrosion and carefully managing wheel condition is essential to ensuring safety. Below are some simple steps you must take to ensure all wheels fitted are safe for use.



NOTES

4. HUB/SPIGOT, WHEEL NUT/STUD AND CENTRING RING INSPECTION (FOR BPW HUBS)

HUB/SPIGOT AND CENTRING RING INSPECTION

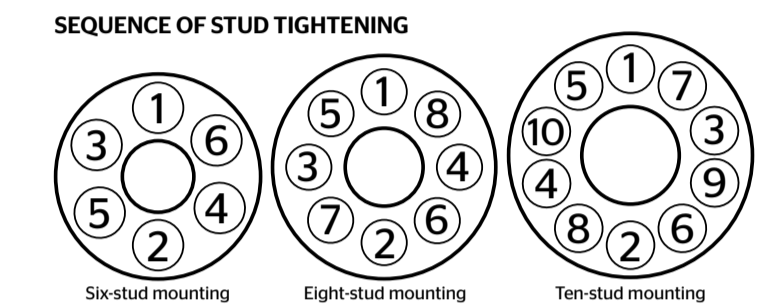


WHEEL NUT/STUD INSPECTIONS



5. WHEEL REFIT PROCESS

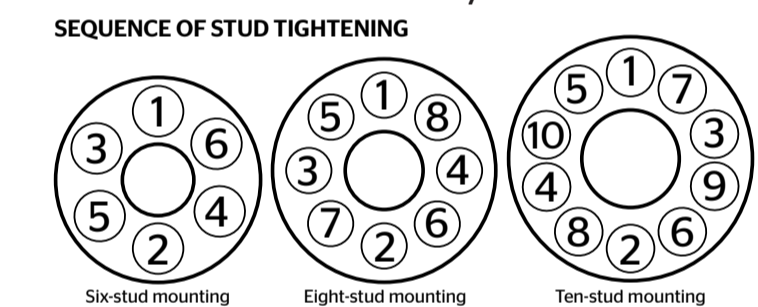
- Ensure correct centralising collar is fitted
- Fit and run up all wheel nuts by hand. If using power tools the use of a ½ inch drive wrench only is permitted to pinch tight, 60nm
- Care must be taken to ensure the correct tightening sequence is followed and that no dirt or foreign matter falls onto the hub or between wheel naves



- Final tightening of wheel nuts must be manually applied with a calibrated torque wrench in the correct sequence. Correct torque settings and sequence can be found in the supplied retorquer manual
- When the torque wrench clicks or slides open STOP immediately

6. WHEEL RE-TORQUE PROCESS

- After 30 minutes a re-torque must be carried out - ensure the correct tightening sequence is followed
- If when wheel nuts are checked at the final wheel nut tightening, and the wheel or nuts are found to move, the wheel must be removed and the reason for the loss of clamping be investigated and rectified. After this rectification the tightening process should commence again. If there are issues found these should be reported to the VMU immediately



- Once the re-torque has been completed yellow, high melting point check points must be fitted to every wheel nut. Any damage check points must be replaced. Please ask VMU for replacement check points



REFERENCES

- FTA/IRTE (2015). An FTA/IRTE best practice guide. Tunbridge Wells: FTA
- Maxion Wheels (2014). Disc Wheels for Commercial Vehicles. Germany: Maxion Wheels

ONGOING RECOMMENDATIONS

- 1 wheel retorquer completed on every routine service
- All wheels removed and full inspection complete on MOT every three, six and nine years
- If vehicle defected for loose wheel nuts, you must follow full process indicated above rather than just completing the retorquer

KEY POINTS

- Is the mating surface free from rust, smooth to the touch without pitting?
- Using light application of WD40, clean the hub mating surfaces with a hand wire brush and/or emery cloth
- Are two centring rings in place 180 degrees apart? Ensure the correct size is used for twin/single fitments