

Overview

This NOS is about inspecting motorcycle tyres on wheels not fitted to a machine, to assess their condition and suitability for repair. It also covers carrying out necessary repair, replacement or refitting activities.

In this standard the term 'motorcycle' includes motorcycles, scooters, mopeds and motorcycle-derived vehicles with a third or fourth wheel (such as quad bikes) on which the rider sits.

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Performance criteria

- You must be able to:
- P1 use suitable personal protective equipment throughout all motorcycle tyre **inspection**, repair and replacement activities
 - P2 use suitable sources of technical information to support your **inspection**, repair and replacement of **motorcycle tyres**
 - P3 work in a way which minimises the risk of damage to the motorcycle and its systems
 - P4 confirm that all the **tools and equipment** required are safe prior to use
 - P5 ensure your **inspection techniques** are sufficiently in depth to identify the severity of all tyre, valve, inner tube and wheel defects
 - P6 conduct all **inspection**, repair and replacement activities following:
 - P6.1 manufacturer's instructions
 - P6.2 your workplace procedures
 - P6.3 health and safety requirements
 - P6.4 the current industry standard for tyre repair
 - P7 carry out all **inspection**, repair and replacement activities using:
 - P7.1 suitable **tools and equipment**
 - P7.2 the correct **inspection techniques**
 - P7.3 the correct type and size of component
 - P8 clearly identify and record the cause of any tyre, valve, inner tube or wheel faults following your normal workplace procedures
 - P9 make clear and accurate recommendations for further action to the relevant person(s), when necessary
 - P10 ensure that replaced and refitted **motorcycle tyres**, valves and any inner tubes are correctly fitted and balanced and conform to legal requirements prior to releasing the motorcycle to the customer
 - P11 dispose of removed components safely to meet legal, environmental and your workplace requirements
 - P12 complete all activities within the agreed timescale
 - P13 report any anticipated delays in completion and any additional faults identified to the relevant person(s) promptly

Knowledge and understanding

You need to know and understand:

Legislative and organisational requirements and procedures

- K1 the health and safety legislation, environmental requirements and workplace procedures relevant to workshop practices and personal and motorcycle protection
- K2 the legal requirements for motorcycle tyres, and the relevant parts of current standards for the repair of **motorcycle tyres**
- K3 how to isolate scrapped tyres and dispose of waste materials in your workplace following environmental requirements
- K4 the importance of disposing of waste correctly and the consequences of not doing so to others, the business and the environment
- K5 the importance of selecting, using and maintaining the appropriate personal protective equipment when inspecting, repairing and replacing **motorcycle tyres**
- K6 the agreed work specification
- K7 your workplace procedures for:
 - K7.1 the referral of problems
 - K7.2 reporting of delays to the completion of work
 - K7.3 personal protection
- K8 the requirements for protecting the motorcycle and contents from damage before, during and after removing and replacing wheels
- K9 the importance of working to agreed timescales and keeping others informed of progress
- K10 the relationship between time and cost
- K11 the importance of reporting anticipated delays to the relevant person(s) promptly

Tools and equipment

- K12 how to select, prepare and use the **tools and equipment** necessary for inspecting, repairing, replacing and refitting **motorcycle tyres**

You need to know
and understand:

Materials

- K13 the types of tyre repair materials available (i.e. rubber only plug patch unit and rubber only patch and filler material)
- K14 the repair material manufacturer's instructions for the application of repair materials for the types of tyre on which you are working

Tyre inspection, removal, repair and replacement

- K15 how to find and use suitable sources of information on motorcycle tyres
- K16 the purpose, function and construction of motorcycle tyres
- K17 the types of valves used in motorcycle tyres and their installation techniques
- K18 the common faults associated with motorcycle tyres and their causes (e.g. normal wear; abnormal wear due to misalignment; incorrect inflation, adjustment, installation and application damage)
- K19 the manufacturer's recommendations on the 'repair ability' of their tyres K20 what a tyre inspection should cover
- K21 the inspection techniques associated with motorcycle tyres and how to conduct them
- K22 the importance of taking accurate measurements and ensuring any adjustments are within acceptable tolerances for the motorcycle
- K23 the importance of basing your decision to replace or repair tyres upon the results of your inspection
- K24 how to remove, repair, replace and refit motorcycle tyres, wheels, tubes and valves
- K25 the importance of checking the safety and operation of **equipment** prior to use
- K26 how to work safely avoiding injury to yourself, others and damage to wheels when removing and refitting motorcycle tyres

Scope/range

All of the items listed below form part of this National Occupational Standard.

1 Motorcycle tyres are:

- 1.1. tube
- 1.2. tubeless

2 Tools and equipment are:

- 2.1. lifting and supporting equipment
- 2.2. tyre removal and refitting tools and equipment
- 2.3. measuring equipment
- 2.4. tyre inflation equipment
- 2.5. wheel balancing equipment
- 2.6. tyre repair tools

3 Inspection covers:

- 3.1. wheel rim and fixings
- 3.2. tyres
- 3.3. valves
- 3.4. inner tubes

4 Inspection techniques are:

- 4.1. visual
- 4.2. measurements of tread depth
- 4.3. tyre pressures
- 4.4. balance

**Additional
information**

Glossary

This section contains examples and explanations of some of the terms used but does not form part of the standard.

Agreed timescales

Examples include manufacturer's recommended work times, job times set by your company or a job time agreed with a specific customer

Sources of information

Examples include hard copy manuals, computer based data, specific manufacturer's instructions

Motorcycles

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Inspect, repair and replace motorcycle tyres



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