IMIMC03a

Fit and test motorcycle enhancements and accessories

Overview

This standard is about fitting and testing enhancements and accessories to new and used motorcycles. These include electrical and electronic items, exhausts, suspension, brakes, wheels, tyres, steering and frame components, security systems and luggage carriers/panniers, not fitted as standard equipment. It is also about evaluating the performance of the fitted enhancements and accessories where applicable.
In this standard the term ‘motorcycle’ includes motorcycles, scooters, mopeds and motorcycle-derived vehicles with three or four wheels (such as quad bikes) on which the rider sits.

Performance criteria

You must be able to:

P1 use suitable personal protective equipment and motorcycle coverings (where applicable) throughout all fitting and testing activities
P2 ensure the motorcycle and the work area is safe prior to work commencing
P3 support your fitting and testing activities by reviewing:

P3.1 motorcycle technical data
P3.2 fitting and testing procedures
P3.3 legal requirements
P4 prepare, check and use all **equipment** required to fit **enhancements and accessories** following manufacturer's instructions
P5 carry out fitting and testing activities following:

P5.1 equipment and motorcycle manufacturer's instructions
P5.2 your workplace procedures
P5.3 health, safety and environmental requirements
P6 work in a way which minimises the risk of:

P6.1 damage to other motorcycle systems, units and components
P6.2 contact with leakage and hazardous substances
P6.3 damage to your working environment
P6.4 injury to self and others
P7 ensure fitted **enhancements and accessories** conform to the motorcycle operating specification and any legal requirements
P8 record and report to relevant person(s) any fitted **enhancement** or **accessory** that does not conform to legal requirements
P9 promptly record and report to relevant person(s) any additional faults you notice during the course of your work

P10 use suitable **testing methods** to accurately evaluate the performance of the fitted **enhancement or accessory**
P11 demonstrate and explain the operation or effect of the **enhancement** or **accessory** fitted
P12 ensure all your records are accurate, complete and promptly passed to the relevant person(s) in the format required
P13 complete all fitting and testing activities within the agreed timescale
P14 promptly report any anticipated delays in completion to the relevant person(s)

Knowledge and understanding

You need to know and understand:

Legislative and organisational requirements and procedures
K1 the legal requirements relating to the motorcycle (including road safety requirements)
K2 the health and safety legislation, environmental requirements and workplace procedures relevant to motorcycle enhancement and accessory fitting and testing activities, and personal and motorcycle protection
K3 your workplace procedures for:

K3.1 recording fitting and testing information
K3.2 the referral of problems
K3.3 reporting delays to the completion of work
K4 the importance of documenting fitting and testing information
K5 the importance of working to agreed timescales and keeping others informed of progress
K6 the relationship between time and cost
K7 the importance of promptly reporting anticipated delays to the relevant person(s)

Use of technical information
K8 how to find, interpret and use sources of information applicable to fitting and testing motorcycle **enhancements and accessories** *
K9 the importance of using the appropriate sources of technical information
***Equipment**
K10 how to prepare, check and use all the fitting and testing **equipment** required
K11 how to calibrate any testing or measuring **equipment** required for the fitting and testing activity
K12 how to clean and store all the fitting and testing **equipment** after use
Electrical and electronic principles
K13 electrical and electronic principles associated with electrical systems, including types of sensors and actuators, their application and operation
K14 types of circuit protection and why these are necessary
K15 electrical safety procedures
K16 how electrical circuits work
K17 electric symbols, units and terms
K18 motorcycle earthing principles and methods
K19 the hazards associated with working on or near high voltage electrical systems and components
Enhancements and accessories fitting and testing
K20 how to fit **enhancements and accessories** for the types of motorcycle on which you work
K21 how to test and evaluate the performance of the fitted **enhancements and accessories**
K22 the equipment manufacturer's instruction for the fitted **enhancements and**

accessories
K23 the motorcycle manufacturer's specification for the fitted **enhancements and accessories**
K24 the motorcycle manufacturer's requirements relating to any remaining warranty
K25 how to work safely, avoiding damage to other motorcycle systems, units and components, contact with leakage and hazardous substances and injury to self and others

Scope/range

1 **Equipment** is:

1.1. hand tools
1.2. special workshop tools
1.3. general workshop equipment
1.4. electrical and electronic testing equipment
1.5. lifting equipment
1.6. measuring equipment

2 **Testing methods** are:

2.1. sensory
2.2. functional
2.3. measurement

3 **Enhancements and accessories** are:

3.1. electrical and electronic units and components
3.2. exhaust components, not fitted as standard equipment
3.3. suspension components, not fitted as standard equipment
3.4. luggage accessories, not fitted as standard equipment
3.5. body accessories, not fitted as standard equipment
3.6. frame accessories, not fitted as standard equipment
3.7. brake components, not fitted as standard equipment
3.8. wheel, tyre and steering components, not fitted as standard equipment
3.9. performance enhancement/restriction components, not fitted as standard equipment
3.10. security system units and components, not fitted as standard equipment

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

Electrical enhancements and accessories
Examples include heated grips, heated seats, audio systems, intercom systems, integrated satellite navigation, cameras, monitoring systems, lighting systems (additional to any factory fitted items), security and alarm systems; electrical rider safety systems

Motorcycles
In this standard the term 'motorcycle' includes motorcycles, scooters, mopeds and motorcycle-derived vehicles with three or four wheels (such as quad bikes) on which the rider sits.

Sensory testing methods
These may include looking, listening, smelling and touching for heat.

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