

Title	Demonstrate knowledge of motorcycle clutches and transmissions		
Level	3	Credits	2

Purpose	This theory-based unit standard is for people in the motorcycle repair industry. People credited with this unit standard are able to demonstrate knowledge of motorcycle clutches and transmissions.
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Classification	Motor Industry > Automotive Transmission Systems
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Available grade	Achieved
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Guidance Information

Definitions

Motorcycle referred to in this unit standard includes on-road and off-road motorcycles, scooters, and all-terrain vehicles (ATVs).

Service information may include but is not limited to – technical information of a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions and specifications; technical terms and descriptions; and detailed illustrations. This can be accessed in hard copy or electronic format and is normally sourced from the manufacturer.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of motorcycle clutches.

Range single plate, wet multi-plate, dry multi-plate, wet centrifugal plate, slipper clutch.

Performance criteria

- 1.1 Types of motorcycle clutch are identified for road and off-road use.
- 1.2 The operation of motorcycle clutches, and the power flow through them, are described in accordance with service information.

Outcome 2

Demonstrate knowledge of motorcycle transmissions.

Performance criteria

- 2.1 The type of gears used in motorcycle manual transmissions, shaft layout, and gear and shaft locations are described in accordance with service information.
Range unit construction, separate construction.
- 2.2 Methods of selecting and changing gears are described, and the parts of a selector mechanism are identified in accordance with service information
Range drum and fork, claw and pin, pawl types.
- 2.3 Methods of lubricating gears, bearings, and bushes are described in accordance with service information.
Range splash type, pressure type.
- 2.4 Types and compatibility of oil used in transmissions and wet clutches are identified in accordance with manufacturer specifications.
Range mineral oil, synthetic oil, interchangeability between types and grades, friction modifiers.
- 2.5 Power flow through a six speed sequential gearbox is explained by plotting through service information diagrams.
- 2.6 Automatic transmission and continuously variable transmission (CVT) types are identified in accordance with service information.
- 2.7 Types of transmission drive systems are identified in accordance with service information.
Range chain, belt, shaft.
- 2.8 The consequences of mismatching tyres and unequal tyre pressures are explained in terms of impact on transmission and differential components.

Replacement information	This unit standard, unit standard 24310, unit standard 24311, unit standard 24312, and unit standard 24313 replaced unit standard 926 and unit standard 927.
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 February 2008	31 December 2020
Review	2	26 April 2018	31 December 2020

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

This unit standard is Expiring