

Title	Explain stern drive transmission		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to explain stern drive transmission operation, and installation and servicing procedures.
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Classification	Motor Industry > Trailer Boat Systems
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Available grade	Achieved
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Guidance Information

Definition

Manufacturers' specifications refer to technical information of a boat or product detailing: operation; installation and servicing procedures; technical terms and descriptions; and illustrations. Manufacturers' specifications must be followed to ensure compliance with manufacturer warranty, safe operation, and operation that meets manufacturer performance claims.

Outcomes and performance criteria

Outcome 1

Explain stern drive transmission operation.

Performance criteria

- 1.1 Stern drive transmission components are explained in terms of purpose and functions.
- Range components include – engine, shift system, transom bracket assembly, power trim-tilt, upper gear housing, lower gearcase, drive train, corrosion mitigation, and cooling.
- 1.2 Operation of a stern drive is explained in accordance with manufacturer's specifications.

Outcome 2

Explain stern drive transmission installation and servicing procedures.

Performance criteria

2.1 Procedures to install stern drive transmissions are explained in accordance with manufacturer's specifications.

2.2 Servicing and testing procedures of stern drive transmissions are explained in accordance with manufacturers' specifications.

Range servicing procedures – steering system lubrication, draining and filling vertical drive, checking power trim-tilt fluid, checking water pick-up screens, lubricating bearings and universal joints, visual inspection procedures
testing procedures – engine and/or drive alignment, pressure and vacuum testing, trim sender and limit function, transom assembly integrity, shift functionality, cooling.

Planned review date	31 December 2030
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 February 1999	31 December 2018
Revision	2	16 April 2003	31 December 2018
Review	3	21 September 2007	31 December 2018
Review	4	28 September 2017	31 December 2027
Review	5	29 May 2025	N/A

Consent and Moderation Requirements (CMR) reference	0136
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at qualifications@hangaarorau.nz if you wish to suggest changes to this skill standard.