



Australian Government

SFIVOP204 Operate and maintain outboard motors

Release: 1

SFIVOP204 Operate and maintain outboard motors

Modification History

Release	Comments
Release 1	This version released with SFI Seafood Industry Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to perform operational checks and maintain outboard motors and diagnose and rectify basic faults. It includes the ability to perform pre-start checks, change fuel and oil filters, and identify and rectify fuel-related and propulsion faults.

This unit applies to individuals who perform operational checks and maintain the outboard motors of small vessels used in aquaculture and fishing operations.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety and environmental regulations, legislation and standards that apply to the workplace. Licences will be required to operate a vessel.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Vessel Operations (VOP)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Operate outboard motors	1.1 Select and fit personal protective equipment according to health and safety requirements 1.2 Perform pre-start checks on the motor according to manufacturer instructions and workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Check outboard motor cooling systems for operation 1.4 Start and stop outboard motors using electric or pull start 1.5 Use outboard motor controls to manoeuvre a vessel both ahead and astern, and to port and starboard 1.6 Operate trim and tilt mechanisms according to manufacturer instructions
2. Maintain outboard motors	2.1 Change fuel filters and maintain fuel quality according to manufacturer instructions 2.2 Maintain electrical systems to ensure reliable electrical supply 2.3 Flush water from the internal and external parts of the outboard motor using the appropriate tools and fresh water, keeping water away from sensitive equipment 2.4 Check and change engine and gearbox oil, and lubricate according to manufacturer instructions 2.5 Secure and check engine mounting gear as required
3. Identify and rectify basic outboard motor faults	3.1 Identify and rectify operating difficulties caused by fuel-related factors according to manufacturer instructions and environmental requirements 3.2 Service outboard engines that were immersed 3.3 Identify and rectify outboard motor propulsion faults according to manufacturer instructions and health and safety requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Calculates fuel to oil ratios or uses tables to find and add correct volume of lubricating oil - Estimates fuel consumption and time at turning points
Reading	Reads and selects information from troubleshooting charts

Skill	Description
Navigate the world of work	Understands main tasks, responsibilities and boundaries of own role
Interact with others	- Identifies and communicates operational and safety observations to relevant persons according to workplace requirements - Selects and uses appropriate terminology and questions when communicating with others about operating and maintenance requirements
Get the work done	Uses tools, equipment and resources dedicated to outboard motor maintenance and operation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
SFIVOP204 Operate and maintain outboard motors	SFISHIP207C Operate and maintain outboard motors	Updated to meet Standards for Training Packages Amendment to element for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273>

Assessment Requirements for SFIVOP204 Operate and maintain outboard motors

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has safely checked and maintained at least one outboard motor of a small vessel on at least one occasion, including:

- performing operational checks, including:
 - pre-start
 - starting and stopping the motor
 - all controls
- performing basic maintenance on an outboard motor, including changing fuel and oil filters and checking mounting gear
- diagnosing and using the appropriate procedure to rectify fuel and propulsion faults

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- health and safety requirements for operating and maintaining an outboard motor
- procedures for operating and maintaining an outboard motor, including:
 - battery connection
 - marine pollution (MARPOL) requirements
 - indicators of engine faults
 - outboard motor cooling systems
 - outboard motor fuel systems
 - outboard motor lubrication systems
 - troubleshooting techniques
- manufacturer instructions for outboard motors.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an aquaculture, fishing operations or fisheries compliance workplace where vessels with outboard motors are used, or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - fully operational small vessel powered by an outboard motor
 - personal protective equipment
 - tools and equipment for maintaining outboard motors
 - consumables, materials, parts and resources
- specifications:
 - workplace procedures for operating and maintaining small vessels with outboard motors
 - manufacturer instructions for operating, maintaining and troubleshooting outboard motors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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