

Modification history

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

SFIVOP207	Operate and maintain outboard motors
Application	<p>This unit of competency describes the skills and knowledge required to perform operational checks and maintain outboard motors and diagnose and rectify basic faults when in isolated situations. It includes the ability to perform pre-start checks, change fuel and oil filters, identify and rectify fuel – related, electrical and propulsion faults.</p> <p>This unit applies to individuals who perform operational checks and maintain the outboard motors of small vessels used in aquaculture, fishing operations or fisheries compliance work where a maritime regulatory certification is not required.</p> <p>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.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Vessel Operations (VOP)

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 workplace health and safety requirements 1.2 Perform pre-start checks on the motor according to manufacturer instructions and workplace procedures 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 dinghy 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 and environmental requirements 2.2 Maintain electrical systems to ensure reliable electrical supply 2.3 Flush seawater from the internal and external parts of the outboard motor using the appropriate tools and freshwater, 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 in isolated situations	3.1 Identify and rectify operating difficulties caused by fuel-related factors according to manufacturer instructions and environmental requirements 3.2 Identify and rectify electrical faults according to manufacturer instructions 3.3 Service outboard engines that were immersed 3.4 Identify and rectify outboard motor propulsion faults according to manufacturer instructions

Foundation Skills	
<i>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.</i>	
Skill	Description
Numeracy	<ul style="list-style-type: none"> Calculate fuel to oil ratios or using tables to find and add correct volume of lubricating oil Estimate fuel consumption and time at turning points
Reading	<ul style="list-style-type: none"> Read and select information from troubleshooting charts
Navigate the world of work	<ul style="list-style-type: none"> Understand main tasks, responsibilities and boundaries of own role
Interact with others	<ul style="list-style-type: none"> Identify and communicate operational and safety observations to relevant persons according to workplace requirements Select and use appropriate terminology and questions when communicating with others about operating and maintenance requirements
Get the work done	<ul style="list-style-type: none"> Use 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
SFIVOP207 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.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273
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TITLE	Assessment requirements for SFIVOP207 Operate and maintain outboard motors
Performance Evidence	
<p>An individual demonstrating competency must satisfy all the elements and performance criteria of this unit. There must be evidence that the individual has performed operational checks, maintained and rectified basic faults of an outboard motor on at least one occasion including:</p> <ul style="list-style-type: none"> • using the required personal protective equipment (PPE) • performing operational checks • starting and stopping an outboard motor • operating all controls on an outboard motor to propel a dinghy ahead and astern • performing basic maintenance on an outboard motor • diagnosing and rectifying basic faults when in isolated situations • applying workplace health and safety practices and environmental requirements. 	
Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • workplace health and safety requirements for operating and maintaining an outboard motor • procedures for operating and maintaining an outboard motor, including: <ul style="list-style-type: none"> • 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	
<p>Assessment of this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • fully operational small vessel powered by an outboard motor • remote steering and controls • PPE • tools and equipment for maintaining outboard motors • consumables, materials, parts and resources • specifications: <ul style="list-style-type: none"> • workplace procedures for operating and maintaining small vessels with outboard motors • manufacturer instructions for operating, maintaining and troubleshooting outboard motors. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273