



**Australian Government**

# **AURTTA012 Fabricate and install fluid power hose assemblies**

**Release: 1**

# AURTTA012 Fabricate and install fluid power hose assemblies

## Modification History

Release	Comment
Release 1	New unit of competency.

## Application

This unit describes the performance outcomes required to fabricate and install fluid power hose assemblies. It involves preparing for the task, fabricating, installing and testing fluid power hoses according to relevant industry standards, and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry. The hose assemblies include those of agricultural machinery, heavy commercial vehicles, mobile plant machinery or outdoor power equipment.

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

## Competency Field

Mechanical Miscellaneous

## Unit Sector

Technical

## Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to fabricate fluid power hose assembly	1.1 Job requirements are determined from workplace instructions 1.2 Fluid power hose fabrication procedures and information are sourced and interpreted 1.3 Options are analysed and selected

<b>Elements</b>	<b>Performance Criteria</b>
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
	1.4 Hazards associated with the work are identified and risks are managed 1.5 Tools and equipment are selected and checked for serviceability
2. Fabricate assembly	2.1 Fluid power hose and fittings are identified and selected according to manufacturer specifications and workplace procedures 2.2 Fluid power hose is fabricated according to relevant industry standards, manufacturer specifications, workplace procedures, and <b><i>safety and environmental requirements</i></b>
3. Install and test assembly	3.1 Procedures and information for hose installation are sourced and interpreted 3.2 Fluid power hose is installed and tested according to manufacturer specifications, workplace procedures, and safety and environmental requirements 3.3 Test results are documented and reported according to workplace procedures
4. Complete work processes	4.1 Final inspection is made to ensure work is to workplace expectations and machinery is presented ready for use 4.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 4.3 Tools and equipment are checked and stored according to workplace procedures 4.4 Workplace documentation is processed according to workplace procedures

## Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance and are not explicit in the performance criteria.

<b>Skills</b>	<b>Description</b>
Learning skills to:	<ul style="list-style-type: none"> <li>locate appropriate sources of information efficiently.</li> </ul>
Reading skills to:	<ul style="list-style-type: none"> <li>interpret operating procedures from manufacturer and workshop literature for fabricating power hose crimping equipment</li> <li>interpret information from manufacturer and workshop literature when seeking fluid power hose assembly specifications and</li> </ul>

Skills	Description
	procedures.
Writing skills to:	<ul style="list-style-type: none"> <li>legibly and accurately fill out workplace documentation when recording parts and material used.</li> </ul>
Numeracy skills to:	<ul style="list-style-type: none"> <li>measure fluid power hose components</li> <li>use mathematical processes, including addition, subtraction, multiplication and division, to calculate: <ul style="list-style-type: none"> <li>distances, tolerances, pressures, force, and temperature</li> <li>deviations from manufacturer specifications</li> </ul> </li> <li>calculate and convert metric and imperial systems of measurement.</li> </ul>
Planning and organising skills to:	<ul style="list-style-type: none"> <li>plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.</li> </ul>
Technology skills to:	<ul style="list-style-type: none"> <li>use precision measuring equipment, such as vernier calipers and hydraulic pressure gauges</li> <li>use fluid power hose crimping tool.</li> </ul>

## Range of Conditions

This section specifies work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Bold italicised wording, if used in the performance criteria, is detailed below.

<b><i>Safety and environmental requirements</i></b> must include:	<ul style="list-style-type: none"> <li>work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: <ul style="list-style-type: none"> <li>working with fluids under pressure</li> <li>working with stored pressure hazards</li> <li>isolating and stabilising vehicle or machinery</li> </ul> </li> <li>environmental requirements, including procedures for trapping, storing and disposing of oil released from hydraulic hoses.</li> </ul>
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## Unit Mapping Information

Equivalent to AURTTA3012 Manufacture and install fluid power hose assemblies

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>