Australian Government

MSFPT3014 Tune a piano aurally and electronically within time and accuracy constraints

Release: 1

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Modification History

Release 1 - New unit of competency

Application

This unit of competency covers tuning an upright and grand piano to a set level of accuracy within a specified timeframe and to an appropriate level of accuracy using aural or electronic tuning devises (ETD) that may include computer software or a hardware device. It applies in workplace and on-site environments for small to large scale enterprises.

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

Pre-requisite Unit

MSFPT3007	Regulate actions, keys and pedals of grand pianos
MSFPT3008	Apply piano tuning theory and basic acoustics
MSFPT3009	Develop control of tuning hammers
MSFPT3010	Pitch raise a piano

Competency Field

Unit Sector

Piano Technology

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Plan for tuning a upright or grand piano	1.1 Work health and safety (WHS) requirements, legislative requirements and workplace practices relevant to repairing pianos are verified and complied with
	1.2 Customer requirements are received, analysed and confirmed with appropriate personnel

		1.3	Communication with others involved with the work is established and maintained to ensure efficient work flow, coordination, personnel cooperation and safety
		1.4	Written instructions are followed
2	Prepare to tune a upright or grand piano	2.1	Tools and equipment are selected consistent with the needs of the job
		2.2	Selected tools and equipment are checked for service ability and safety, and any faults repaired and reported according to workplace practices
		2.3	Personal protective equipment is correctly fitted and used
3	Dismantle piano	3.1	Procedure for dismantling piano is determined
		3.2	Piano is dismantled to allow access to internal components during the tuning process
		3.3	Correct WHS procedures are followed throughout dismantling process
		3.4	Safe storage of all piano parts while tuning is demonstrated
4	Tune piano	4.1	Correct posture for tuning is demonstrated which minimises fatigue and promotes muscular control
		4.2	Start note is tuned accurately to a pitch standard
		4.3	Temperament octave F33-F45 is tuned to desired standard
		4.4	Octaves and unisons are tuned to desired standard in accordance with customer specifications
		4.5	Interval checks are used to assess accuracy throughout tuning process
		4.6	Stable tuning is achieved in an industry acceptable timeframe without damage to the piano components
5	Re-assemble piano	5.1	Case parts are identified and placed for re-assembly
		5.2	Case parts are re-assembled according to workplace practices
		5.3	Correct WHS practices are followed throughout assembly process

6	Clean up work area	6.1	All tools, materials and other equipment are checked, cleaned and returned to their appropriate location
		6.2	Work area is cleared and waste removed
		6.3	Workplace documentation is completed and filed

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

Range of Conditions

Specifies different 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. Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit context includes:

- WHS requirements, including legislation, building codes, material safety management systems, hazardous and dangerous goods codes, and local safe operating procedures or equivalent
- work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements
- work requires individuals to demonstrate some discretion, judgement and problem solving

Customer requirements include:

- level of playing required:
  - standard of pianist
  - time piano is used
- environment
- location of piano
- pitch requirements
- budget

Tools and equipment include:

- pitch standard
- tuning lever/hammer
- temperament strip

	• mutes and wedges • tip wrench • tuning tips and heads

Procedures for dismantling piano include:	• upright piano:
	  • removal of top front board and fall board
	  • lift lid
	• grand piano:
	  • removal of fall board and music disk
	  • lift lid

Correct posture includes:	• standing or seated according to type of piano and height of individual • evenly distributing body weight between both feet while standing to reduce fatigue • resting arm where available to aid control during tuning and reduce tiredness
Start notes include:	• the note in the temperament octave that corresponds to the note tuned from the pitch standard • the first note tuned on piano from pitch standard generally accepted as being A49/C52 or corresponding notes one octave below, which are A37/C40
Pitch standards include:	• piano • electronic keyboard • ETD • tuning fork
Interval checks include:	• thirds, fourths, fifths, sixths, sevenths and tenths
Industry acceptable timeframe is:	• up to 2 hours
Damages to the piano components include:	• bent tuning pins • broken strings • elongated tuning pin holes • damaged bearings
Personal protective equipment includes:	• that prescribed under legislation, regulations and enterprise policies and practices
Information and procedures include:	• workplace procedures relating to the use of tools and equipment • work instructions, including job sheets, cutting lists, plans, drawings and designs • workplace procedures relating to reporting and communication • manufacturer specifications and operational procedures

Unit Mapping Information

Supersedes and is equivalent to LMFPT3014A Tune a piano aurally and/or electronically within time and accuracy constraints.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73