



Australian Government

Department of Education, Employment and Workplace Relations

LMFPT3010A Pitch raise

Revision Number: 1

LMFPT3010A Pitch raise

Modification History

Not applicable.

Unit Descriptor

| | |
|------------------------|---|
| Unit descriptor | This unit describes the skills and knowledge required to pitch raise a piano prior to the tuning process. |
|------------------------|---|

Application of the Unit

| | |
|--------------------------------|--|
| Application of the unit | <p>This unit applies to the skills and knowledge required to calculate and assess the ability of an upright, grand and player piano to achieve the desired pitch. The type of work tasks performed in acquiring the skills and knowledge required to pitch raise a piano include assessing condition of the piano and calculating overpull or stretch of strings.</p> <p>The unit applies in a workplace and on-site environment and may be conducted in a small to large scale enterprises.</p> |
|--------------------------------|--|

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

| | | |
|---------------------------|-------------------|--|
| Prerequisite units | | |
| | <i>LMFPT3007A</i> | <i>Regulate actions, keys and pedals of grand pianos</i> |
| | | |

Employability Skills Information

| | |
|-----------------------------|--|
| Employability skills | This unit contains employability skills. |
|-----------------------------|--|

Elements and Performance Criteria Pre-Content

| | |
|---|--|
| Elements describe the essential outcomes of a unit of competency. | Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide. |
|---|--|

Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|--|--|
| 1. Plan for pitch raising | 1.1. OHS requirements, legislative requirements and workplace practices relevant to tuning 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 workflow, coordination, personnel cooperation and safety throughout the application of this competency. 1.4. Written instructions are followed. |
| 2. Prepare to tune unisons | 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. Assess suitability of piano for pitch raise | 3.1. Components used in pitch raising are assessed for suitability. 3.2. Distance from target pitch is determined. 3.3. Overpull/stretch required to achieve target pitch is calculated. 3.4. Pitch standard is established. |
| 4. Pitch Raise Piano | 4.1. Correct posture for tuning is demonstrated, which minimizes fatigue and promotes muscular control. 4.2. Tune strings according to required process 4.3. Pitch raise to achieve an accuracy of ± 5 cent per note. 4.4. Correct tuning hammer technique is used. |
| 5. Clean up work area | 5.1. All tools, materials and other equipment are checked, cleaned and returned to their appropriate location. 5.2. Work area is cleared and waste removed. 5.3. Workplace documentation is completed and filed |

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- communicate ideas and information to enable confirmation of work requirements, plans and specifications, co-ordination of work with other workers and customer, and report of work outcomes and problems
- work collaboratively with others to complete tasks in a timely manner
- use pre-checking and inspection techniques to anticipate problems and identify tools or equipment faults and take appropriate action
- identify and select practical solutions to problems using analytical skills
- determine opportunities to improve processes
- plan and organize activities to avoid any backtracking, workflow interruptions, re-work or wastage, including preparation and layout of the worksite and selection of tools and equipment
- take responsibility and display confidence in own ideas
- apply mathematical applications for estimation and measurement
- use workplace technology related to piano technology, including specified tools, equipment, calculators and measuring devices for piano tuning

Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to the full range of processes for tuning pianos
- organisational and site standards, requirements, policies and procedures for tuning pianos
- reading and interpreting workplace documents, including work orders, work instructions and operator instructions
- environmental protection requirements relating to the disposal of waste material
- established lines of communication and protocols
- types, characteristics, uses, limitations and preparation of materials and equipment used in piano tuning
- types of tools and equipment used to regulate actions, keys and pedals and procedures for their safe use, operation and maintenance
- problem identification and resolution
- set up and operation of tools and equipment used for tuning pianos
- storage systems and labelling
- procedures for the recording, reporting and maintenance of workplace records and information
- appropriate mathematical procedures for estimation and measurement

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- Interpret work order, locate materials and use information to complete tasks to pitch raise upright, grand and player pianos
- Identify tools and equipment used in pitch raising
- Select, set up and maintain equipment in accordance with manufacturer specifications and workplace practices
- Tune a minimum of three sets of strings on at least an upright and grand piano
- Pitch raise a minimum of three times on at least an upright and grand piano
- Modify activities to cater for variations in workplace contexts and environment
- Communicate and work with others in the work area
- Apply safe handling practices and safe operating procedures for equipment, products and materials to:
 - minimise the risk of injury to self or others
 - prevent damage to goods, equipment and products
- Clean tools, equipment and work area
- Maintain and repair a range of hand and power tools used in piano regulation and repair
- Apply OHS practices when using hand and power tools, holding and support equipment, products and materials, including use of personal protective equipment

Context of and specific resources for assessment

Assessment may occur on the job or in a simulated workplace environment in accordance with work practices and safety requirements

Assessment is to occur under standard work practices, and to comply with legislative and regulatory requirements.

The following resources should be made available:

- hand and power tools used in the tuning and repair of pianos
- materials used in the tuning and repair of pianos
- safety and personal protective equipment

| EVIDENCE GUIDE | |
|-----------------------------|---|
| | <ul style="list-style-type: none"> • holding and supporting equipment • workplace location or simulated workplace • upright and grand pianos |
| Method of assessment | <p>Assessment must confirm consistency (over time and in a range of workplace relevant contexts) in application of skills and knowledge when:</p> <ul style="list-style-type: none"> • organising work • completing tasks according to instructions • working systematically with attention to detail • identifying improvements and avoiding damage • using workplace practices • using OHS practices • assessing operational readiness of tools and equipment • recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions <p>Assessment must include a variety of project or work activities that allow the candidate to demonstrate competency in the unit</p> <p>Assessment should be by direct observation of tasks and include questioning on required knowledge and skills to ensure correct interpretation and application.</p> <p>Assessment should be conducted over time and may be in conjunction with assessment of other units of competency</p> |

Range Statement

| RANGE STATEMENT | |
|--|--|
| <p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> | |
| Legislative/regulatory requirements | All work must comply with relevant Federal and State or Territory legislative or regulatory requirements. |
| OHS requirements may include: | Relevant Federal, State or Territory OHS legislation, regulations, standards and codes of practice, and workplace policies and procedures, including the use of personal protection equipment, hazard and risk control and manual handling. |
| Legislative requirements may include: | Relevant Federal, State or Territory legislation including award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, the environment, equal opportunity, anti-discrimination, industry codes of practice. |
| Workplace practices may include: | Site guidelines, policies and procedures relating to own role, quality assurance, procedural manuals, tool manufacturer's recommendations, ethical standards, recording and reporting, equipment use, maintenance and storage, environmental management (waste disposal, recycling, re-use). |
| Tools and equipment may include: | <ul style="list-style-type: none"> • tuning fork • tuning lever/hammer • temperament strip • mutes and wedges • tip wrench • tuning tips and heads • pitch standard |
| Personal protective equipment may include: | Safety glasses, goggles, hearing protection, safety footwear, protective clothing, gloves, respiratory protection |

| RANGE STATEMENT | |
|---|--|
| Components may include: | <ul style="list-style-type: none"> • strings • wrest plank / tuning plank • frame • soundboard • bridges |
| Pitch standard may include: | <ul style="list-style-type: none"> • piano • electronic keyboard • electronic tuning device (ETD) • tuning fork |
| Correct posture may include: | <ul style="list-style-type: none"> • Standing or seating, according to type of piano and height of individual • Even distribution of body weight between both feet while standing, to reduce fatigue • Rest arm where available to aid control during tuning and reduce tiredness |
| Pitch raising may occur: | <ul style="list-style-type: none"> • when a piano is more than one cycle flat or sharp from desired standard |
| Tuning process may include: | <p>For a small pitch raise, normal tuning sequence is followed.</p> <p>For a significant pitch raise, chromatic tuning from note #1 could be required.</p> |
| Workplace documentation may include: | Time sheets, customer cards, work orders including job sheets, cutting lists, plans, drawings and designs, tool maintenance records and schedules |

Unit Sector(s)

| | |
|--------------------|------------------|
| Unit sector | Piano Technology |
|--------------------|------------------|

Competency field

| | |
|-------------------------|--|
| Competency field | |
|-------------------------|--|

Co-requisite units

| Co-requisite units | | |
|--------------------|--|--|
| | | |
| | | |