



Australian Government

MSFPT4005 Regulate actions, keys and pedals of grand pianos

Release: 1

MSFPT4005 Regulate actions, keys and pedals of grand pianos

Modification History

Release 1. Changes to code, application, elements, performance criteria, assessment requirements. Foundation skills added. Range of conditions removed. Assessment requirements changed.

Application

This unit describes the skills and knowledge required to regulate grand piano actions, keys and pedals, including adjusting glide bolts, striking distance, hammer running alignment, key height and depth, set off and drop; checking distance, damper regulation damper stop rail, jack and repetition lever adjustment, sustain, soft and sostenuto pedals.

This unit applies to piano technologists who work in accordance with established procedures, using discretion, judgement and problem-solving to apply and communicate technical solutions to resolve predictable and unpredictable issues.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Competency Field

Piano Technology

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Plan and prepare for work	1.1 Analyse and confirm job requirements with personnel, customer or from workplace documentation 1.2 Identify and follow work health and safety requirements including physical and ergonomic needs 1.3 Establish and maintain communication with others involved with work to ensure efficient workflow, coordination, personnel cooperation and safety 1.4 Analyse written instructions and apply to job requirements 1.5 Select tools and equipment consistent with needs of job, inspect for serviceability and safety, and repair any faults or report in accordance with workplace procedures
2. Assess and align	2.1 Determine correct action operation by setting trial regulation

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
action components	standards 2.2 Inspect and adjust action rail to ensure optimal alignment 2.3 Inspect and adjust hammer running and angling to ensure optimal alignment 2.4 Align wippen in accordance with workplace procedures 2.5 Bed action to key frame and bed key frame to key bed in accordance with workplace procedures
3. Regulate keys	3.1 Level, square and space keys in accordance 3.2 Inspect and make required adjustments to key depth
4. Regulate actions	4.1 Assess and make required adjustments to jack-to-roller alignment and repetition lever height to achieve optimal note repetition 4.2 Inspect and adjust striking distance to industry specifications 4.3 Assess and make required adjustments to let-off to achieve optimal key control 4.4 Assess and make required adjustments to checking distance to achieve optimal key control 4.5 Assess and make required adjustments to repetition spring to achieve optimal note repetition 4.6 Assess and make required adjustments to hammer drop to industry specifications 4.7 Inspect and regulate dampers to industry specifications
5. Assess and adjust pedals	5.1 Inspect and adjust sustain pedal to lift when pedal is one third through its motion 5.2 Assess and make required adjustments to soft pedal to operate in accordance with acceptable lost motion 5.3 Assess and make required adjustments mute pedal so hammers clear felt in rest position but strike felt in lockdown position 5.4 Assess and make required adjustments to sostenuto pedal so relevant dampers are locked in position when note is played
6. Make final check and inspection	6.1 Inspect grand piano for playability and performance against expected standards 6.2 Make further required adjustments to actions and pedals to achieve optimal outcomes

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
7. Clean up work area	7.1 Check, clean and store equipment and any unused materials in accordance with workplace procedures 7.2 Clean work area, safely dispose of rubbish and identify items for recycling in accordance with workplace procedures and environmental standards 7.3 Complete required workplace records

Foundation Skills

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

- Reading skills to interpret familiar workplace procedures and work documentation
- Writing skills to communicate information in familiar workplace documents
- Numeracy skills to measure and estimate material requirements.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes and is not equivalent to MSFPT3007 Regulate actions, keys and pedals of grand pianos.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFPT4005 Regulate actions, keys and pedals of grand pianos

Modification History

Release 1. Changes to code, application, elements, performance criteria, assessment requirements. Foundation skills added. Range of conditions removed. Assessment requirements changed.

Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- regulate actions, keys and pedals in at least three grand pianos.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- workplace standards, requirements, policies and procedures for regulating grand piano actions, keys and pedals
- types, characteristics, uses, limitations and preparation of materials and equipment used in piano regulating
- types of tools and equipment used to regulate actions, keys and pedals and procedures for their safe use, operation and maintenance, including:
 - capstan regulator
 - set off regulator
 - touch/dip block
 - rule
 - regulating buttons
 - damper regulator
 - key easing pliers
 - wire bender
 - screwdriver
- tasks required to regulate dampers, including:
 - damper lift
 - damper stop rail
 - damper travel
 - alignment to strings
 - damper spacing
 - damper guide bushings
- problem identification of grand piano actions, keys and pedals and resolution
- set-up and operation of tools and equipment used for regulating actions, keys and pedals

- procedures for recording, reporting and maintaining workplace records and information
- best physical and ergonomic approaches to promote muscle control and avoid fatigue, including:
 - standing or seated according to type of piano and height of individual
 - evenly distributing body weight between both feet while standing to reduce fatigue
 - use a resting arm, where available, to aid control during tuning and reduce tiredness
- work health and safety requirements for piano tuning.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources required for performance evidence, including:
 - grand pianos
 - hand and power tools
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>