



Australian Government

Department of Education, Employment and Workplace Relations

ACMFAR311A Fit shoes to alleviate severe faults and defects in horses

Revision Number: 1

ACMFAR311A Fit shoes to alleviate severe faults and defects in horses

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	<p>This unit of competency covers the processes required to prepare the feet of a horse exhibiting severe faults or defects, and to apply appropriate shoes to alleviate the problem.</p> <p>This unit forms part of the requirements of the trade qualification for farriery.</p>
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Application of the Unit

Application of the unit	<p>This unit is applicable to farriers working in farriery workplaces who are required to fit shoes to horses who exhibit a range of severe faults and defects where the level of assessment and remedial technique is regarded as severe. It may be necessary for the farrier to work as part of a team with other professionals such as a veterinarian.</p> <p>In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify shoeing needs of individual horses	<p>1.1. Horses are handled appropriately to reduce stress and alarm, behaviour is monitored to eliminate risks to horse or handlers, and restraints are used as required.</p> <p>1.2. Features of gait and conformation of the horse are identified.</p> <p>1.3. Severe faults and defects of the horse that may be alleviated by the farrier are identified, together with the modifications and types of surgical shoes that may alleviate the problem.</p> <p>1.4. A working position is adopted which maintains comfort of the horse and ensures comfort and personal safety of the farrier and any assistants.</p> <p>1.5. Shoes are removed safely, using tools appropriate for the task and ensuring no damage is caused to the feet of the horse.</p> <p>1.6. Feet are cleaned of all foreign bodies to facilitate examination of the hoof, ensuring all relevant factors are taken into account.</p> <p>1.7. The shoe is examined, and implications of the wear pattern are assessed for trimming and shoeing.</p> <p>1.8. Any conditions requiring higher-level treatment are reported to other farriers or to veterinarians involved with hoof care as required.</p> <p>1.9. The agreed foot care plan is amended with the responsible person, taking into account conditions of the feet not previously identifiable.</p>
2. Trim and prepare feet	<p>2.1. Appropriate shoeing tools are used to safely trim and prepare feet to achieve balance, level and shape, and to correct any identified foot defects.</p> <p>2.2. Trimming operations are conducted without injury to the horse's feet.</p> <p>2.3. Work is visually checked, while in progress and on completion, to ensure quality outcomes of foot preparation have been achieved.</p>
3. Fit shoes	<p>3.1. Correct type, material and size of shoes are selected according to the shoeing plan and modifications are made as required by the individual horse.</p> <p>3.2. Appropriate tools are selected for the purpose of fitting shoes.</p> <p>3.3. Selected shoes are shaped to incorporate any</p>

ELEMENT	PERFORMANCE CRITERIA
	<p><i>ancillary features</i> as determined by the foot care and shoeing plan.</p> <p>3.4. Shoes are fitted to fore and hind feet, and the need for any <i>final adjustments</i> is assessed.</p> <p>3.5. Final adjustments are made to the shape and size of the shoe to achieve correct fit, with any ancillary features being added to the shoe as determined by the work requirements of the horse.</p> <p>3.6. Health and safety of the horse, self and others is maintained throughout the process.</p>
4. Attach shoes and finish shoeing process	<p>4.1. Tools and nails are selected, suitable for attaching and clenching shoes.</p> <p>4.2. The shoe is safely attached, securely and in the correct position, ensuring the <i>relevant factors</i> are taken into account.</p> <p>4.3. The hoof is finished according to specification, and the <i>finished</i> job assessed along with the welfare of the horse.</p> <p>4.4. The horse is trotted to identify any signs of lameness.</p> <p>4.5. The responsible person is informed of actions taken, and advised on horse's future foot care requirements.</p> <p>4.6. Appropriate records of service provided are maintained.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- adhere to occupational health and safety (OHS) and animal welfare legislation, regulations and codes of practice
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- maintain records as appropriate
- recognise and work within own limitations
- literacy skills to read and follow organisational policies and procedures, including OHS, waste management and hygiene standards; follow sequenced written instructions; and record the information accurately and legibly
- oral communication skills/language to fulfil the job role as specified, including questioning, active listening, asking for clarification and seeking advice when required
- numeracy skills to estimate, calculate, record and apply routine workplace measures to required tasks including measurements to assess shoe requirements
- problem-solving skills to select required materials and equipment and prioritise tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures
- work as part of a team with other professionals, including veterinarians.

Required knowledge

- anatomical features of the lower limb and foot of the horse and applicable biomechanical functions
- conformation, normal gait and abnormalities of gait and how the farrier can alleviate a range of severe faults and foot problems through shoeing
- effects of trimming on the stance and action of the horse
- general anatomy of the horse
- limits of safe trimming and why these must not be exceeded
- relevant legislation and codes of practice and personal responsibilities
- safe work practices
- types of surgical horse shoes and modifications that may be made to address the needs of a horse exhibiting severe faults and defects.

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.

Overview of assessment

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

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- assess the shoeing needs of individual horses exhibiting severe faults and defects of the foot or lower limb that may be alleviated by the farrier
- report conditions requiring higher-level treatment to other farriers or to veterinarians involved with hoof care as required
- discuss shoeing options with clients
- trim and prepare feet
- select and fit appropriate pairs of shoes to alleviate severe faults and defects and assess quality of outcomes
- provide advice on future hoof care requirements and maintain records of service provided.

The skills and knowledge required to fit shoes to alleviate severe faults and defects in horses must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

Context of and specific resources for assessment

Assessment of this unit is to be practical in nature and will be most appropriately assessed in worksites, where routine farriery tasks are performed, or in a situation that reproduces normal work conditions.

There must be access to a range of horses presenting with severe faults and defects as well as the appropriate equipment and/or resources to enable one to demonstrate competence.

EVIDENCE GUIDE	
Method of assessment	<p>To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities.</p> <p>The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none"> • written and/or oral assessment of candidate's required knowledge • observed, documented and first-hand testimonial evidence of candidate's application of practical tasks • simulation exercises that reproduce normal work conditions • case study analysis • third-party evidence • workplace documentation • portfolio. <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p>
Guidance information for assessment	<p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p>

Range Statement

RANGE STATEMENT

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><i>Risks to horse or handlers</i> may include:</p>	<ul style="list-style-type: none"> • completing farriery tasks: <ul style="list-style-type: none"> • applying fillers and other treatments • cleaning and sharpening tools • exposure to noise, dust, skin and eye irritants • handling horses • manual handling associated with working with tools and metal • removing, replacing and fitting shoes • trimming feet • working with fire to shape shoes, shoe horses and weld • working with hazardous items including electricity, heat, gas and other flammables • outside distractions: <ul style="list-style-type: none"> • noise • movement • other animals • vehicles • uneducated, stressed or difficult horses.
<p><i>Restraints</i> may include:</p>	<ul style="list-style-type: none"> • head collar or halter and lead • muzzles • anti-rearing bit • chemical sedatives prescribed by and administered under the supervision of a veterinarian • hobbles • leg ropes • twitch. <p>Note: The majority of horses are quiet, easily managed and require no restraint. Where restraint is</p>

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	required it must be the minimum necessary and should always be determined through consultation with the owner or responsible person.
<i>Features of gait and conformation</i> may include:	<ul style="list-style-type: none"> gaits: <ul style="list-style-type: none"> walk trot pace canter gallop jump action characteristic actions of various breeds and types of horses common faults of the skeletal system, stance and their effects on gait common injuries of the muscular system and their effects on gait ideal action and alignment relationship of the conformation of the foot and limb to the way of going.
<i>Severe faults and defects</i> in horses' feet that may include:	<ul style="list-style-type: none"> injuries caused by the shoe: <ul style="list-style-type: none"> capped elbow overreach defective feet: <ul style="list-style-type: none"> flat foot twisted foot weak or low heels injuries caused by abnormalities of gait: <ul style="list-style-type: none"> brushing/speedy cutting cross-firing forging knee hitting over-reaching scalping stumbling diseases and injuries of the limb and foot which require protection and relief of pressure through the provision of specialist techniques or surgical shoes: <ul style="list-style-type: none"> bone spavin

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	<ul style="list-style-type: none"> • corns • curb • false quarter • fractured pedal bone • keratoma • laminitis • navicular disease • pedal osteitis • ring bone • seedy toe • sidebone • splints • sprained joint • sprained ligament • strained or ruptured tendon • the condition of the foot should be assessed: <ul style="list-style-type: none"> • with the shoe on • with the shoe off.
<i>Tools for removing and fitting shoes</i> may include:	<ul style="list-style-type: none"> • anvil • buffer • clenching tongs • nail pullers • pincers • pritchel • rasp • shoe shaper • shoeing hammer • hot shoe tools: <ul style="list-style-type: none"> • hot fit tongs • water bucket and water.
<i>Relevant factors</i> when assessing feet may include:	<ul style="list-style-type: none"> • condition of the existing shoe • condition of the hooves • general condition of the horse • temperament of the horse • the approximate age of the horse • the work that the horse will perform • type of surface the horse will work on.
<i>Implications of wear pattern</i>	<ul style="list-style-type: none"> • indicators of uneven weight bearing:

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may include:	<ul style="list-style-type: none"> • variations in shoe thickness on ground contact surface • uneven hoof wear • shoe movement on foot • indicators of stumbling or other forms of interference • indicators of poor fit: <ul style="list-style-type: none"> • presence of bruising or corns • shoe is pressing on sensitive structures • clenches have risen.
<i>Tools for trimming feet</i> may include:	<ul style="list-style-type: none"> • hoof nippers or cutters • rasp • paring knife • toe knife.
Considerations required to safely <i>trim</i> and prepare feet may include:	<ul style="list-style-type: none"> • growth rate of the shod versus the unshod hoof • trimming aims achieve a level bearing surface and a normal pastern foot axis, it involves: <ul style="list-style-type: none"> • study of the shape and proportions of the foot • identification and correction of any defects • balance of the foot in relation to the length of toe and height of heel • adjusting any irregularities or unevenness in the bearing surface • checking the balance of the foot in relation to the pastern foot axis • determining how much hoof needs to be removed in relation to a range of conditions: <ul style="list-style-type: none"> • achieving normal weight bearing in weak heels • broken hoof and pastern angle • correctly dressing the upright foot • heels too high • heels too low • hoof wall reduction • medial or lateral growth • paring down the discoloured horn where there is a corn • reducing the side of the wall that is too high until a level bearing surface is

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	<p>obtained in the case of a twisted foot</p> <ul style="list-style-type: none"> • toe too long • any problems noticed by owner in relation to break over of hoof or interference.
Hoof trim considerations in relation to <i>injury to the horse's feet</i> may include:	<ul style="list-style-type: none"> • a badly dressed foot is not only altered in shape but also in position relative to the leg, which in turn influences the action of the limb • injury may occur through the following faults in dressing the foot: <ul style="list-style-type: none"> • inadequate removal of excess hoof • overparing the frog • overparing the sole • over-lowering the toe • over-lowering the heels • over-lowering the bearing surface • uneven bearing surface • opening up the heels • rasping the wall and dumping the toe.
<i>Quality outcomes</i> of foot preparation may include:	<ul style="list-style-type: none"> • achieve optimal conformational relationships between angles of leading wall of hoof line, long axis of pastern and angle of shoulder • avoidance of reaching sensitive tissue • checking angles and shape of foot • the weight is evenly distributed over the foot • toe clip is cut in balance with hoof shape if clip is required • when viewed from behind, both heels are the same height and the base of the frog just touches the ground • when viewed from the side, the toe, quarters and heels are proportionate and the pastern foot axis is in a straight line.
<i>Shoe selection</i> considerations may include:	<ul style="list-style-type: none"> • characteristics of the horse: <ul style="list-style-type: none"> • assessment of horse's action • conformation • shape of its feet • size and weight • wear patterns of existing shoes • work it performs

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	<ul style="list-style-type: none"> shoe types in various sizes and weights fitted hot or cold: <ul style="list-style-type: none"> bar shoe diamond toed shoe egg bar shoe feather edged shoe graduated shoe heart bar shoe raised heels rocker bar shoe seated out shoe shoe with quarter clips, heel clips and/or side clips shoe with set heel side weights square toe three quarter bar shoe three quarter shoe other considerations in shoe selection: <ul style="list-style-type: none"> Rules of Racing shoe requirements other sport and working horse requirements: <ul style="list-style-type: none"> breed requirements carriage and draught horse shoes endurance hacking and dressage mule or donkey shoes polo and polocrosse showjumping, eventing and hunting working stock horse and western events.
<i>Ancillary features</i> may include:	<ul style="list-style-type: none"> bar extra clip extra nail holes pads seating out shortening or lengthening heel stud holes.
<i>Final adjustments</i> may include:	<ul style="list-style-type: none"> hot or cold shoes may be fitted: <ul style="list-style-type: none"> surface fitting, where the foot surface has to be adapted exactly to the bearing surface of

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	<p>the hoof</p> <ul style="list-style-type: none"> • outline fitting, which means adaptation of the shoe to the length and breadth of the hoof with the outer border of the shoe corresponding to the outline of the bearing surface • checking and adjusting shoe to reduce the risk of: <ul style="list-style-type: none"> • close fitting • wide fitting • checking length of shoe to assess if: <ul style="list-style-type: none"> • heels are too long • heels are too short.
<i>Relevant factors</i> may include:	<ul style="list-style-type: none"> • nailing on a shoe should avoid: <ul style="list-style-type: none"> • nail bind • pricks • sole pressure • holding horse's leg at a comfortable angle during nailing to: <ul style="list-style-type: none"> • discourage horse from moving away during nailing • enable horse to stand in a balanced position • prevent injury to farrier due to poor manual handling techniques.
Factors taken into account when <i>finished job is assessed</i> may include:	<ul style="list-style-type: none"> • securing shoe to foot: <ul style="list-style-type: none"> • using an appropriate number of nails to secure shoe • selecting nails of appropriate size and length for hoof quality and shoe type • setting nails in appropriate position around hoof • nailing on the shoe in sequence • clenches even, flat and broad, nails driven to standard height • nails driven home, with heads fitting the countersinks • with foot on the ground assess: <ul style="list-style-type: none"> • front and hind feet are pairs, the same size and shape and the same pastern foot axis • no excessive rasping of the wall

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	<ul style="list-style-type: none"> • no dumping of the wall (making the foot fit the shoe) • clips low and broad and the toe clip centred with correct angle to the hoof wall • shoe fits the outline of the foot and heels are of correct length • with foot off the ground assess: <ul style="list-style-type: none"> • no unnecessary paring of the frog and sole • heels not opened up • toe clip centred and in line with the point of the frog • sole eased at the seat of corn • no daylight between the foot and the shoe • shoe fits the foot and the heels do not interfere with the function of the frog • shoe is properly finished off • horse shows no sign of lameness when trotted up.
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Unit Sector(s)

Unit sector	Farriery
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		

