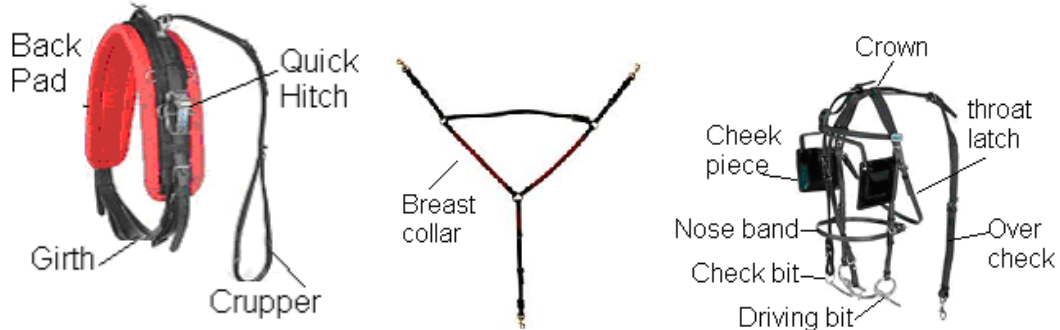


EQUIPMENT

Standardbred trotters and pacers require basic equipment that includes the harness, breast collar, lines and bridle.

- The harness includes the crupper, back pad, girth, the lines and the quick hitch. The quick hitch is where the sulky attaches to the harness.
- The breast collar is buckled around the horse's neck and then attached to the harness to prevent it from slipping back.
- The bridle consists of the crown, the cheek pieces, the throat latch (which prevents the bridle from falling off), noseband, the overcheck, the overcheck bit and the driving bit.



Bridles

Different kinds of cheek pieces in bridles are available. The cheek pieces are the part of the bridle that restricts the vision of the horse.

- Open bridle allows the horse to see every angle
- Blind bridle restricts the horse from seeing beside and behind him
- Kant See Back bridle restrains the horse from seeing behind him
- Telescopic bridle, also called Peek-a-boo bridle, restricts the vision of the horse to only a small view in front
- Swedish blind bridle allows the driver to remove the Blind bridle by pulling it up with a string and turning it into an open bridle at any point in the race
- Blinker bridle restricts the horse's vision to a partial side and front view



Open bridle



Blind bridle



Kant See Back bridle



Telescopic bridle



Swedish Blind Bridle



Blinkers Bridle

An ear hood or earplugs can be added to a bridle to keep the horse from hearing noises that may make him nervous or anxious. Pull-out earplugs are also utilized which allow the driver of the horse to remove the earplugs by pulling a string with his foot at any point in a race.



Ear hood



Ear plugs

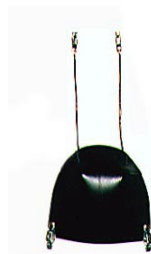


Pull-out ear plugs

Other devices such as head poles, with or without a burr, line pole, line burr, bit burr, jawbreaker or Murphy blind can be added to the bridle to help maintain a horse in a straight line. When a horse bears in, a head pole is used on the inside; the head pole is attached from the head halter ring to the harness. A Murphy blind could also be used on the left for a horse that bears in; the Murphy blind is attached to the bridle to restrict the vision of the horse. Bit burr and Jawbreaker can be added to the existing bit of the horse for better steering.



Head pole



Murphy blind



Bit burr



Jawbreaker

Some horses are tempted to jump objects or shadows on the racetrack. A variety of shadow rolls are available in different sizes and styles depending on the horse. Shadow rolls are made of sheepskin and are placed above the horse's nose and below its eyes. Fly screens are also used for horses that do a lot of looking around or for horses that dislike the dirt hitting their faces.



Shadow roll

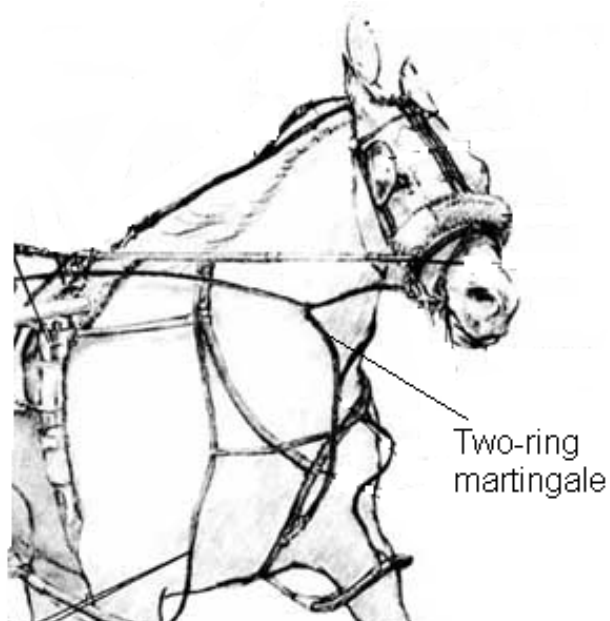
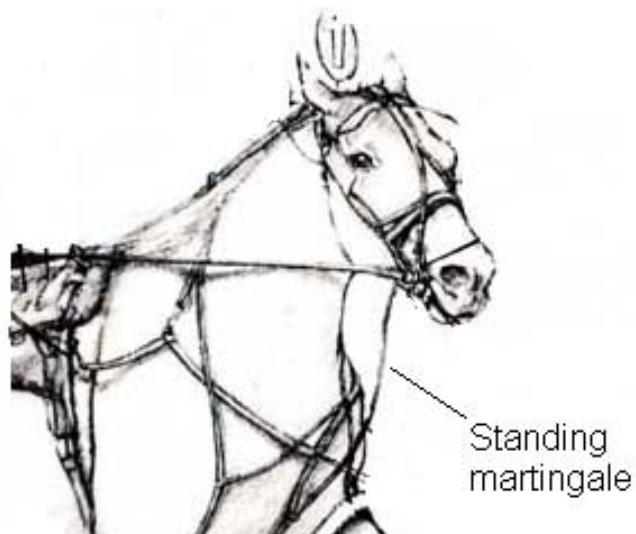


Roll-up shadow roll



Shadow-blind Shadow roll

A “martingale” is used on a horse that carries his head too high or throws his head up. A “two-ring martingale” is also used for the same purpose, but applies pressure through the horse’s mouth, as the lines go through the rings of the martingale.












BITS

There are two types of bits, driving bits and overcheck bits and they come in many varieties. The purpose of a driving bit is to help provide the driver with control of the horse. The different types will help with horses that are pullers or difficult to steer whereas the overcheck bit helps keep the head of the horse to a desired level.







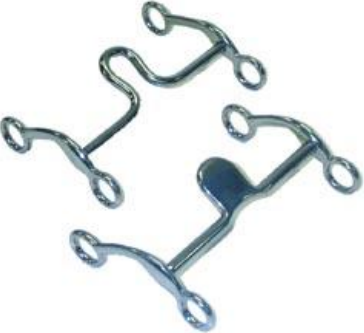





Most trainers will use a Frisco June bit to break a yearling. After days or months of jogging, changes might become necessary. Depending on the type of horse you are dealing with, a more severe bit might be needed. You may consider using a wire bit on a horse that has a tendency to pull and a sideling, Houghton, Braden direct or a slip mouth on a bad steering horse. A normal snaffle would be sufficient for a good steering and quiet horse.

A variety of overcheck bits is available for all types of horses. The majority of trainers will start the horse off with a Standard overcheck bit. The purpose of an overcheck bit is to enable the trainer to set the horse's head to a desired height. Some horses might need a type of overcheck to enable them to lean on it like a standard overcheck, a Speedway a Mini or just a basic chin strap. Some horses tend to tuck their heads in and in doing so are stopping the air passage in their throat. These horses will require a more severe overcheck bit like a Crit Davis, Burch, Z guide or a Bar bit.

TYPES OF DRIVING BITS

		
Simpson	Dr. Bristol	Double wire
		
Snaffle	Riegle, leather covered	Dr. James
		
Single wire	Slip mouth sidelining	Crescendo
		
Frisco June	Braden Direct	Houghton

TYPES OF CHECK BITS

		
Chin strap	Birch	Hutton
		
Plain standard or straight overcheck	Mini-bit	Speedway
		
Crit Davis	Double Bar crabbe	McKerron
		
Bar bit	Raymond	Z-guide

HOPPLES

Hopples, although most commonly used on pacers are also available for trotters. The pacing hopples consist of two oval loops attached together by a strap and differ in length depending on the horse. The hopples hang from the harness with “hopplehangers” and one loop is put through the front leg and the other loop through the back leg on the same side. The hopples help the horse maintain his gait keeping both legs on the same side moving in rhythm.



Pacers may race with or without hopples and those that race without hopples are referred to as “free-legged pacers”.

The trotting hopples are designed so that both loops go through the front legs and are attached with a string that goes through a pulley. Like the hopples for pacers, the trotting hopples are used to help keep the horse on stride.



Unlike the pacers, most trotters race without hopples. However, trotting hopples are sometimes used for horses that refuse to trot or horses that make breaks.

Trotting or pacing hopples need to be adjusted in length for each individual horse. It is the trainer’s job to find the correct length for each individual horse; some horses need to wear tight hopples and some need more loose fitting hopples, if the horse requires hopples at all. Some horses may need different size hopples for different size racetracks. It is a trial and error process to find the proper hopple fit for each horse wearing hopples.

BOOTS

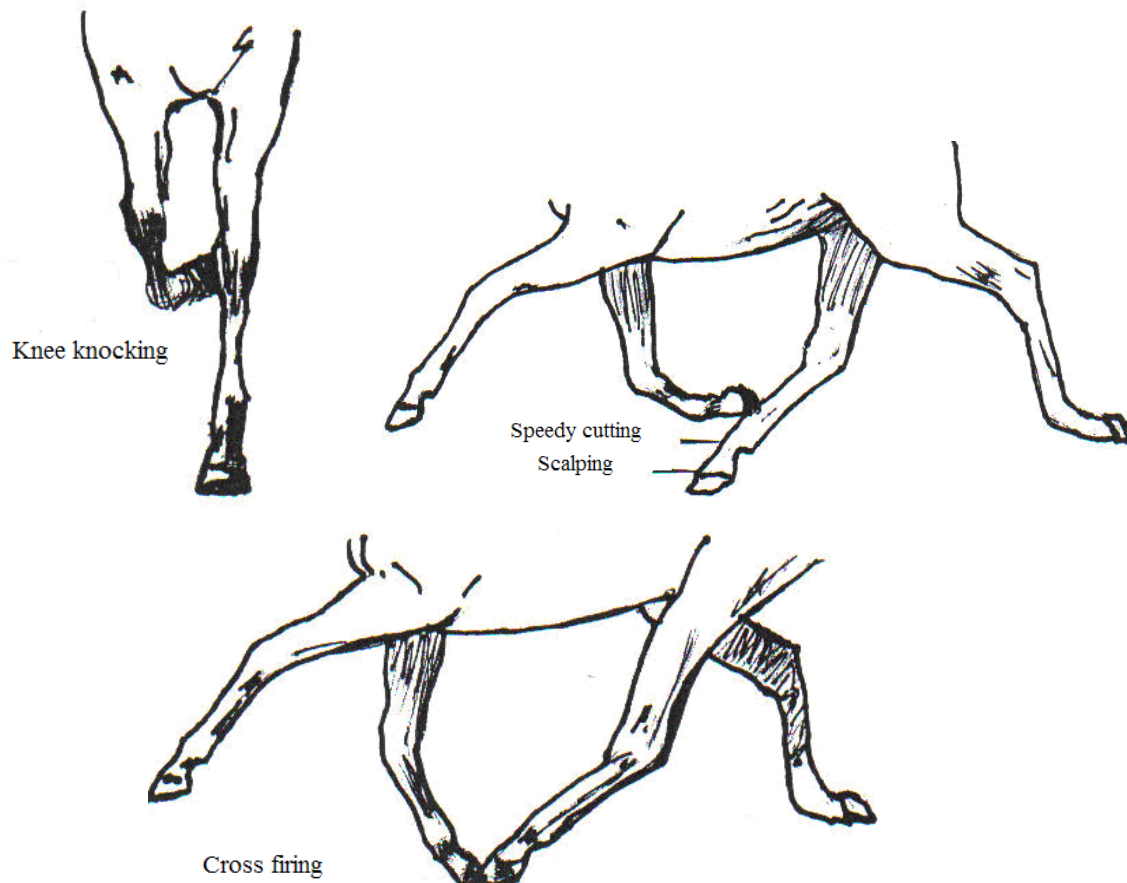
Horses wear a variety of different boots to protect certain areas of their legs from interference or as an aid in correcting their gait. Horses often hit themselves when they reach a certain speed, most commonly caused by the horse's conformation.

“Knee knocking” is when a horse brings a front foot up and forward reaching over and hitting the opposite knee. Knee knocking horses should wear knee boots to prevent injuries.

“Scalping” occurs when a trotter hits his back coronary band with his front foot. “Scalpers” are used to protect a horse from scalping. Pacers can also require scalpers however the pacing scalpers are shorter in height than the trotting scalpers.

“Speedy cutting” is the action of a trotter hitting his hind pastern with his front hoof. Hind shin boots with a speedy cut connection protect the horse from injuring himself.

“Cross firing” is when a horse hits his front quarter with his back hoof. Quarter boots or bell boots would protect his front quarters.



All of these gait interferences can be aided or corrected by using different kinds of shoes or by changing the angle of the hoof by tipping the hoof a certain way. These interferences can also be aided by adding gaiting aids like “**spreaders**” or “**gliders**” for horses that hit their knees. Spreaders and gliders help spread the horse’s front legs apart; ribbed bell boots or toe weights add weight which extends the horse’s stride, and brace bandages widen the horse’s back legs. Every horse is different and it sometime takes a lot of time and perseverance to correct the horse’s gait.



Any trainer who wishes to change bridles, hobbles or shoes on a horse from one race to another must apply to the Judges for permission to do so, no changes should be made without such permission.

TYPES OF BOOTS

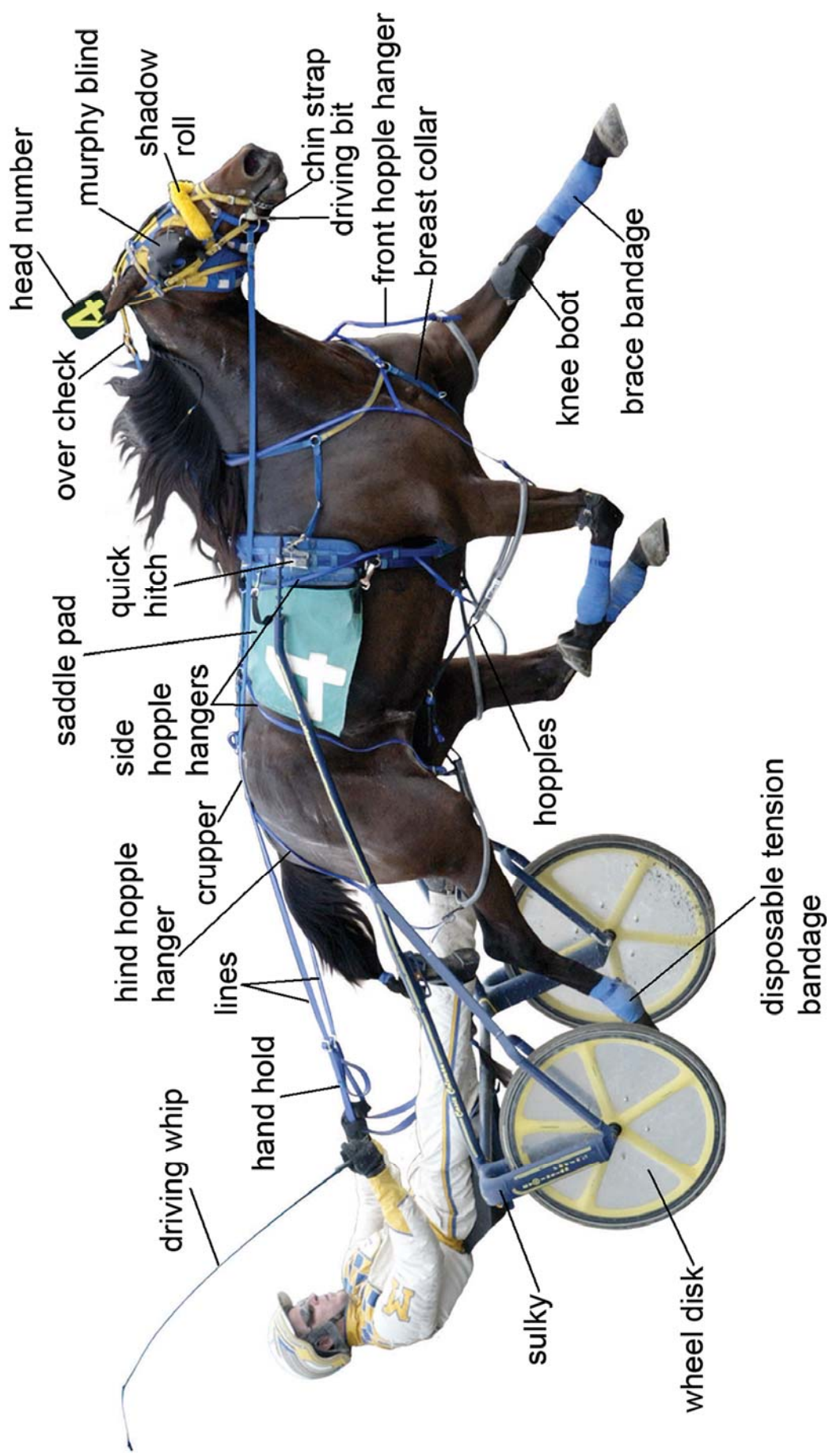
		
<p>Ribbed bell boots (Pacers & Trotters)</p>	<p>Bell boots smooth (Pacers & Trotters)</p>	<p>Quarter boot (Pacers)</p>
		
<p>Scalper (Long for Trotters-short for Pacers)</p>	<p>Pastern boot (Pacers & Trotters)</p>	<p>Run-down boot (Pacers & Trotters)</p>
		
<p>Front shin (Pacers & Trotters)</p>	<p>Tendon and half knee (Pacers & Trotters)</p>	<p>Splint and half knee (Pacers & Trotters)</p>

		
<p>Knee boot (Pacers & Trotters)</p>	<p>Knee and arm (Pacers & Trotters)</p>	<p>Hind ankle boot (Trotters)</p>
		
<p>Hind shin-full hock with speedy-cut (Trotters)</p>	<p>Hind shin-half hock with speed-cut (Trotters)</p>	<p>Hind shin with speedy-cut (Trotters)</p>
		
<p>Hind shin without speedy-cut (Trotters)</p>	<p>Brace bandages (Pacers & Trotters)</p>	<p>Elbow boots (Trotters)</p>

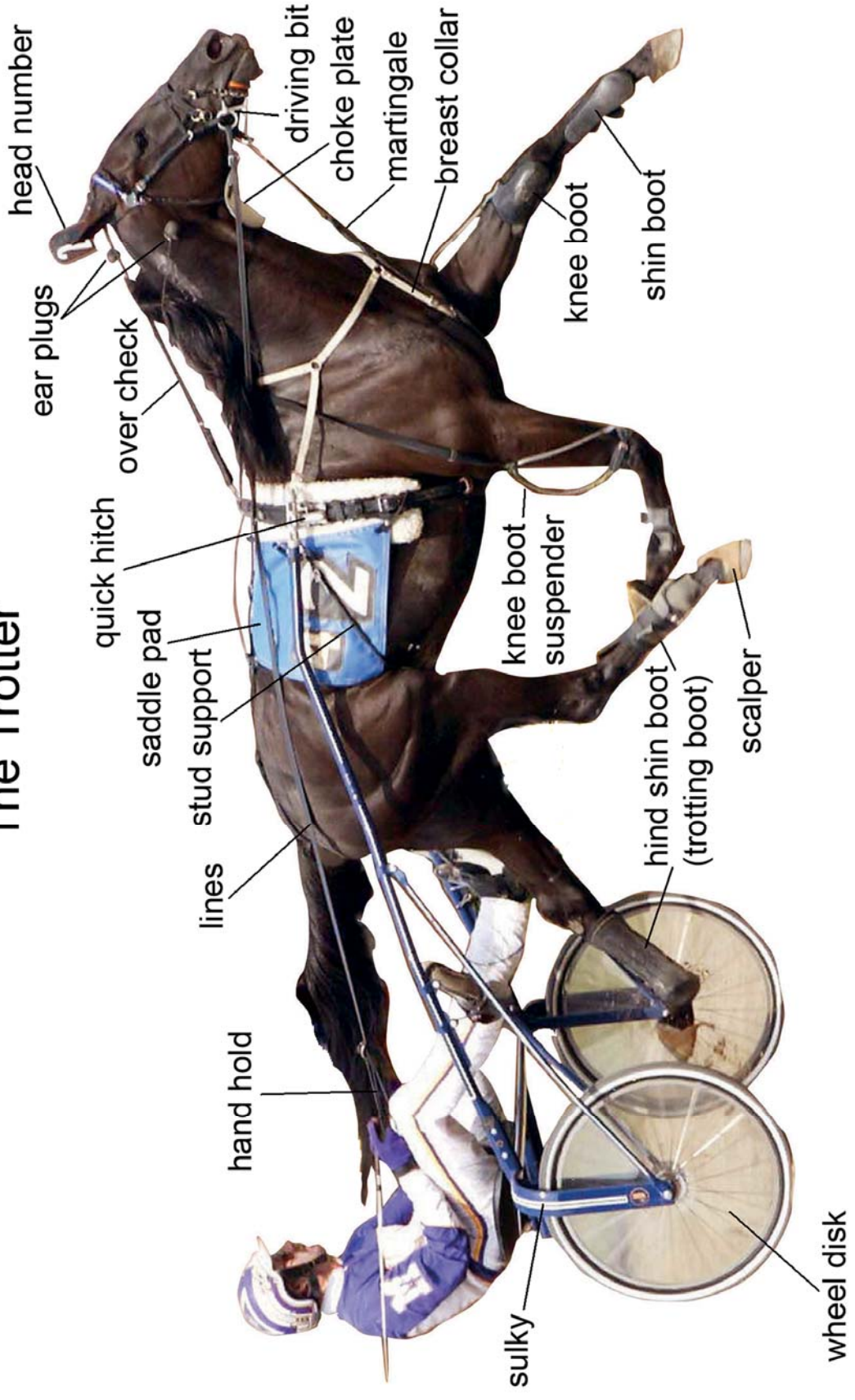
USE OF EQUIPMENT

Bell boots	Protect the horse's hoof from interference and can be used to add weight to help balance a horse's gait
Bit burr	Added to the existing bit to prevent a horse from getting on a line
Blind bridle	Used on a lazy horse or a horse that likes to do too much looking around
Boots	Protect certain areas from interference/injury
Brace bandages	Widened gait behind and help support and protect injured legs
Breast collar	Prevent harness from slipping back
Cheek rolls	Sheep skin roll attached to open bridle acts the same as a Kant See Back bridle
Choke plate	Prevents the horse from cutting his air passage by ducking his head
Crupper	Prevents harness from slipping forward
Ear plugs/hood	Prevents horse from hearing noises that may disturb him
Figure 8 halter	Keeps horse's mouth shut and is more severe than head halter
Four-ring check	Prevents a horse from lying too hard on the overcheck by applying pressure through the lines.
Gaiting strap	Keeps a horse from moving from side to side between the shafts
Gliders/Spreaders	Widens the horse's front legs to prevent a horse from hitting its knees
Head halter	Keeps horse's mouth shut and is used to attach the martingale and head pole or to put a horse in the cross ties with his bridle on
Head pole/line pole	Keeps horse's head straight but cannot protrude past the horse's nose and can be accessorized with wrapped around burrs
Hobbles	Helps to keep a horse on stride
Hobble hangers	Attached to the harness to support the hobbles
Jawbreaker	Used on a bad steering horse, can be even on both sides or with an extension on one side, the extended side would be used on a horse bearing in on the opposite side
Kant See Back	Restrains the horse from seeing behind him
Kicking strap	Prevents the horse from kicking over shaft of bike or jogger
Lip cord	Prevents a horse from pulling
Martingale	Prevents a horse from raising his head, the two ring martingale prevents the horse from raising his head in applying pressure to the horse's mouth through the lines
Murphy blind	Restricts the horse's view, keeps a horse going straight
Open bridle	Keeps a horse calm
Shadow roll	Prevents horse from seeing shadows or objects on the racetrack
Spoon	Applied to overcheck bit like a double bar, for a horse that leans on the overcheck, the spoon puts pressure on the roof of the horse's mouth
Stiff crupper	Prevents harness from slipping forward and prevents the horse from switching his tail
Tail tie	Prevents the horse from switching his tail and from kicking by tying tail to bike or jogger
Tongue tie	Prevents the horse from choking by swallowing his tongue by keeping the tongue under the bit.

The Pacer



The Trotter



SHOEING

In many trainers' eyes, the shoeing of a Standardbred is key to a sound equine athlete and most trainers rely on a good blacksmith. The main purpose of shoeing is to insure that all four hooves are level when hitting the racing surface. This helps with soundness and maximizes speed performance.

The two most important factors when having a horse shod is the length of the toe and the angle of the hoof. The length of the toe and the height of the heel, while the foot is level to the ground, determine the angle. Blacksmiths use a tool called a "hoof level" to determine a horse's angle. Conformation of the animal will have an affect on the natural angle of a horse's foot. In order to balance and gait a horse, the trainer will have his blacksmith either lower or raise the hoof angle.

The length of the toe plays a very important role in shoeing as it affects the balance of the horse and whether or not the horse interferes.

A perfect trotter would wear approximately a 3 ½ inch toe and a 48° angle in front and a 3 ¼ toe behind with a 54° angle. However, there are not many nearly perfect trotters or trotters that don't have any interference problems. A "caliper" is the tool used by blacksmiths to measure the length of the toe. While the longer toe will create more balance in a trotter, some trainers prefer to keep their trotters with a shorter toe to prevent interference and unsoundness issues as a longer toe puts more strain on the body of the horse.

The length of the toe can be changed just by rasping or trimming, with a blacksmith's rasp or with some "nippers". Trimming some of the toe and not touching the heel will raise the angle of the hoof. On the other hand, if you want to lower the angle of the foot, it can be done by trimming some of the heel off and not removing any of the toe.

The perfect pacer would wear around a 3 1/4 inch toe on front with a 50° angle and a 3 1/8 inch toe with a 54° angle behind, but again this is the perfect pacer.

Just like trotters, the angle and the length of the toe will affect the horse's gait. As an example, if a pacer picks up his front feet very high, in an up and down motion, the trainer may want to lower the heel in front, which will cause the horse to have a longer stride.

With both trotters and pacers, and depending on whether the horse interferes by hitting his knees, cross firing, scalping or speedy cutting, a patient blacksmith may be able to help.

There are three basic shoe types for both trotters and pacers, namely swedge, half-round and flat shoes. All come in different sizes and weights and can be made of steel, aluminum or even plastic.

The Swedge shoe has a crease in it, and the crease can be all the way around or extend halfway around, helping a horse to grab on the racetrack.

The Half-round shoe is round on the part that strikes the racetrack thereby helping a horse to break-over easily.

The Flat shoe is just that, flat, but often blacksmiths add a borium grab or calk to it so the horse can grab the racetrack.

The weight and the size of the shoe will depend on the horse. Pacing shoes are usually lighter than trotting shoes and plastic and aluminum shoes are much lighter than the steel shoes. Having said that, steel and aluminum shoes are the most commonly used in Standardbred racing. Sometimes some horses will require more weight, ribbed bell boots can be used or toe weights, allowing the horse to extend his stride.

Calk, grab and bars can be added to the shoes by the blacksmith. Calk and grab will give the horse more traction, whereas the bar will help a horse with a sore foot as it takes the pressure off the foot. Depending on the soreness of the hoof, the blacksmith might also suggest a "mushroom" shoe, also to take the pressure off different areas of the foot. Plastic and leather pads can be placed between the hoof and the shoe for horses with sore feet. There are also many kinds of pads, some come with a cushioned frog, some are magnetic and you can get plastic angled pads, to correct the horse's angle.

Some horses might need a square toe to break over more easily and, truth be known, some trainer like to turn the shoes on a horse backwards. For a horse that crossfires, some trainers will ask the blacksmith to "diamond toe" the horse behind or to add a trailer (extension to the shoe). Shoeing a horse plays an important part in the horse's racing success but is very often a difficult and frustrating task.

TYPES OF SHOES

		
Steel full-Swedge	Aluminum Swedge with grab	Steel Half-round
		
Aluminum Swedge square toe with grab	Mushroom shoe	Half round-half Swedge
		
Flat steel with side clip	Diamond-toe with trailer	Aluminums Egg-bar
		
Heart-bar shoe	Standard bar shoe	Bar-shoe
		
Plastic shoe	Toe weight	Pad

APPROVED SULKIES

The following sulky models have been approved for use at all North American Racetracks. These models have successfully completed Test Procedure (Static Load and Dynamic Load Testing) by the University of Dayton Research Institute.

SULKY COMPANY	APPROVED MODELS		
American	Challenger One (M)		
BlackJack	BlackJack II (M)		
BlackJack by Pennsbury	BlackJack II (M)	BlackJack IV (AA)	Joker (M)
	Outlaw (AA)	BlackJack Trotter (M)	The Sheriff (A)
Brodeur	Golden B (W)	Golden B Gaiting Shaft (W)	Golden Lite (A)
	The Deflector (A)	The Super Lite (A)	The Propeller (M)
	The Reactor (M)	The Reactor Plus (M)	T-Rex (AA)
	4 Stars (M)		
Custom	Flexure (W)	Flexure S (W)	Flexure ST (M)
	2000 (W)	2000 ES (W)	Viking-S (W)
	Multiflex TZ (M)	North American (M)	C.A.M. (C)
	WINCEN (c)		
Enterprise	Laser (M)		
The Equalizer Co.	The Equalizer (C)		
Evolution Racing	AdvantEdge 6.3 (M)	AdvantEdge Pro 2 (M)	AdvantEdge Pro207 (M)
Evolution Racing by Pennsbury	AdvantEdge 6.3 (M)		
FabWeld	The Time Machine (M)		
Gambler	The Gambler (M)	The Cone (M)	
Graphite Racing	The Graphite Bike (G)		
Hobby Cart	Advantage (W)		
Jerald	Golden J (W)	Straightener (W)	Golden SR (W)
	Leader (A)	Millennium (AT)	XJS (A)
	XJS Cyclone (A)	Razor OS (M)	
Joy Ride	Standard (W)		
Inch's Tooling	Wallabee 2		
Intruder	Roadrunner II (A)	Flying Eagle (A)	
Nassau	Bandit (M)	American (W)	Speed Bandit (M)
Oval Technologies	Oval-Epic 140 (AA)	The Natural (AA)	
Pennsbury	Pathfinder (M)	Tracker (W)	Stabilizer-Wood (W)
	Stabilizer-Metal (M)	Keystone Bike (M)	The Rocket Offset (AA)
	Silver Streak (AA)	Silver Bullit (AA)	The Lightning (AA)
	X Factor (AA)	Flex-Lite (AA)	
Precision	White Knight (M)		
Quick Hitch II	20001 WD (M)	Pace 20001 (W)	
Regal	Classic/Conventional (SS)		
Saraydar	Glider I (AA)		
Stealth Racing LLC	Stealth Racing 1 (M)		
Tel Star	Eliminator (AA)	Terminator (AA)	Elevator (AA)
	Undertaker (AA)	The Predator (AA)	Mach 1 (AA)
	Shortcut 9.10 (AA)		
Truex Racing LLC	Transition MOC 1 (M)		
TWR Group	Astec (C)	Bottle Neck (C)	
Xtreme Engineering	45 (M)		
6015191 Canada Inc.	Innov Tecno (AA)		

Key: (A) - Aluminum Shafts (AA) - All Aluminum (AT) - Aluminum/Titanium
(C) - Carbon Fiber/Kelvar (G) - Graphite (M) - Metal Shafts
(SS) - Stainless Steel (W) - Wood Shafts

NOTE: Wooden shaft bikes may not be permitted in your Jurisdiction, contact your racing Authority in your Jurisdiction.