



## How it Works: The Importance of Core Strength

Core musculature stabilizes the horse's back in movement. Core strength helps to prevent the development of back pain and injuries. The Equiband™ system has been designed specifically to stimulate receptors in the horse's skin and hair follicles.

In response to this stimulation, the abdominal, oblique, sublumbar and deep neck and back muscles are activated. These muscles stabilize the spine, and engage the hindquarters during movement.

Regular use of the Equiband™ system strengthens this core musculature, making it easier for the horse to work with an optimal posture, which reduces the risk of pain and injury due to hollowing or instability of the joints in the neck and the back.

The Equiband™ system (est. 2011) is a completely unique design that promotes continuous core activation during ridden, lungeing, or in-hand exercise. It is suggested for use with a program of ground-based core activation and strengthening techniques, and only with veterinary and/or licensed therapist guidance.



## The Equiband® System

Your Equiband® system can be used during ridden or groundwork exercises. It comes complete with one saddle pad, two pre-threaded sets of Equiband® (two shorter abdominal bands and two longer hindquarter bands), as well as a tape measure and user guide. For safety, it is essential to follow the included guide on how to fit and use the Equiband® system.



The Equiband® is made of a unique latex-free resistance band, specifically designed for use on horses. The Equiband® system uses either one or both bands on the horse.

### Abdominal Band (AB):

The shorter band attaches the left side of the saddle pad to the right, passing under the abdomen. The band sits well behind the rider's leg. Its function is to stimulate the abdominal and oblique musculature during locomotion. The abdominal musculature supports the horse's back. The position of this band is especially indicated for horses that have **recovered from a colic surgery**, have **poor (inverted) posture**, and in clinical cases such as **diagnosed conditions of the back, including 'kissing spines'**.

### Hindquarter Band (HQ):

The second and longer Equiband® attaches at an oblique angle from the left side of the saddle pad to the right, passing under the tail, behind the horse's hindquarters. It will settle in the point of least resistance, anywhere above the hock and just below the level of the stifle. Its function is to make the horse aware of the position of his hind limbs in locomotion, and to enhance proprioception. Use of this band is especially indicated for horses with **asymmetrical hind limb movement, poor engagement, and poor development of major muscle groups** such as biceps femoris (which is associated with movement), as well as horses **recovering from diagnosed musculoskeletal or neurological conditions** (such as EPM).

### Saddle Pad:

The saddle pad is available in multiple sizes to achieve optimal muscle activation for all breeds of horses and ponies. It is ergonomically shaped to prevent any restriction in the wither or lower back regions. The clips that attach Equiband® to the saddle pad are designed for durability and safety. The saddle pad is designed for use with jumping, dressage and western saddles, as well as surcingles.

# The GENUINE Equiband® System User Guide

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## When to Use

- The Equiband® system is recommended for initial daily use, however, the goal of the system is to reduce use over time to one to two sessions per week as the horse learns to maintain his own core muscular strength.
- The Equiband® system recruits muscles that many horses do not recruit naturally. To avoid fatigue and muscle soreness, the system must be used for short periods of time with regular walk/rest breaks during the session. Duration of use can be increased gradually as the musculature strengthens.
- Neuromuscular activation is best achieved at the start of a session, particularly during the warm-up phase. Always use the band system at the start of a workout, and remove the bands if necessary.
- We recommend use of the abdominal band before adding the hindquarter band
- It is known that neuromuscular adaptation to new exercise takes four to six weeks, and it takes up to three months to gain full strength and condition. Once the horse is fully conditioned, use of the Equiband® system can be tapered down to weekly or twice weekly use for maintenance of core muscle function.
- Individual results may vary, and if any gait irregularity is noted, use of the Equiband® system must be ceased immediately and veterinary attention must be sought.





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## Care of Your Equiband® System

- For optimal care of your saddle pad, we suggest delicate wash in cool water with a mild detergent with low tumble dry or air drying after washing. Avoid frequent machine washing in order to preserve the longevity of your pad.
- The Equiband® resistance bands can be washed with petroleum-free soap, rinsed, and left to air-dry before storage
- Store bands in a temperature and humidity-controlled environment. Do not leave bands exposed to full sun/extreme cold.
- Do not use fly spray over the bands or over any area where the bands are in direct contact with the horse
- Brush the horse thoroughly where the bands will lay to remove any debris
- For best storage, roll (do not fold) the bands

## Safety Precautions

- Follow all care instructions above
- Prior to use, Equiband® must be securely attached to the saddle pad via the safety clips and trigrilides
- Always ensure that each Equiband® is unclipped on both sides, prior to loosening the surcingle or girth after work
- Examine Equiband® before each use, checking for tears or punctures that may cause the band to break; if the band appears flawed, cease use, and discard immediately.
- Avoid the use of sharp spurs directly over Equiband® – blunt spurs can be used, but rider leg position must be checked to ensure that there is no direct interference with the abdominal band.
- Equiband® resistance bands will need to be replaced periodically. A spare band is provided with the Complete Equiband® system, and additional Equiband® sets can be ordered at [www.equicoreconcepts.com](http://www.equicoreconcepts.com)

# The GENUINE Equiband® System Step-by-Step Fitting Guide

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## 1. Desensitize the Horse to the Touch of Equiband®

Gently rub Equiband® across the horse's abdominal and hindquarter regions on both sides, and under the tail.



## 2. Fit the First Band

For this stage, have a helper present. Fit the Equiband® slowly and carefully, with sufficient tension to not hang loose. Handwalk, jog and lunge the horse. Even sensitive horses will rapidly accustom to the sensation of Equiband®. Some horses will show more difference in back flexion with the abdominal band, and others will be more reactive to band around the hindquarters. To start, apply only one band at a time and repeat the same process when introducing the horse to a second band.



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## 3. Adjust the Band for Optimal Tension

Adjust the tension of the band prior to mounting. Equiband® is delivered pre-threaded and is adjusted by shortening or lengthening the band below the safety clip band through the triglides (below the safety clips) that attach the band to the saddle pad. Excess can be trimmed using scissors.

Using the tape measure supplied, measure the distance between the two clips on the pad (between left and right sides: either along the hindquarter region or under the abdomen). The clips on the actual band can then be measured at no less than half of the distance apart. For example, if the distance between the two clips on the pad (left to right side) is 40 inches, the band should be adjusted to no less than 20 inches. Shortening the band too much will inhibit movement. If the band is too loose, the desired core activation may not be achieved.



## 4. Handjog and/or Lunge the Horse Prior to Mounting

Before mounting, handjog and trot or lunge the horse. Have a helper present when mounting the horse for the first time after fitting Equiband®. Allow the horse to accustom to the feeling of Equiband® at walk before moving into trot or canter.



# The GENUINE Equiband® System Step-by-Step Fitting Guide

## 5. Adding or Adjusting Equiband®

To add or swap to second band repeat steps 1,2, and 3. Only fit Equiband® without the rider on the horse. Always dismount when adding or swapping Equiband® and have a helper present until the horse is fully accustomed to use of the Equiband® system.



## 6. Usage

The Equiband® system is intended for in-hand work, and during lungeing and riding. Use the Equiband® system at the start of a workout graduating to use for a full session. Ensure that the horse receives regular breaks as the increased engagement of the core musculature will cause earlier fatigue in work. If the horse appears unlevel with use of the Equiband® system, cease use immediately and seek veterinary evaluation and/or advice. Use Equiband® from the start of work, emphasizing transitions between and within gaits. Reduce full riding time by half as increased core muscle engagement may cause fatigue.



### Notes from Equicore Concepts:

If the abdominal band slips back or if the hindquarter band rides up, check the tension – it is often too loose. For optimal postural fit, ask for an abdominal lift when fitting the abdominal band, and ensure that the horse is standing under itself with the hind legs when fitting the hindquarter band.

Always use the band system at the start of a workout, and remove the bands if necessary. Do not add the bands after warm-up or during a riding/training session: this defeats the objects of neuromuscular stimulation. Neuromuscular activation is best achieved at the start of a session, particularly during the warm-up phase. We recommend use of the abdominal band before adding the hindquarter band.



# The GENUINE Equiband® System Research

The Equiband® System is the only resistance band system that has been researched, and the results of which have been published in peer-reviewed journals.

## The Equiband® System improves stability of the spine during walking and trotting

Findings from studies show that Equiband® has a positive effect on spinal stability in motion (back and pelvis), which is key for optimal athletic performance.



**Dynamic stability** is the stability of the spine during movement. Two studies have been performed to measure the effect of the Equiband® System on stability of the spine in horses, during walking and trotting exercises. Dynamic stability of the vertebral column is important to reduce risk of pain or injury from hollowing or instability of the back during exercise.

The first study was performed by veterinary scientists at the Royal Veterinary College in the UK. Seven horses that were free from lameness and involved in training and competition at various levels, were recruited for a 4-week exercise program.

The exercise program consisted of fitting the Equiband® System with the abdominal and hindquarter bands at 30% of the maximum tension. All Equiband® exercise was performed at the beginning of the horse's normal workout session for the indicated time, and exercises emphasized transitions between gaits.

- Week 1: In-hand work with the Equiband® for 5 minutes per day/ 5 days per week prior to the horse's normal exercise routine
- Week 2: In-hand and ridden work with the Equiband® for 10 minutes per day/5 days per week at the beginning of the horse's normal exercise routine
- Week 3: In-hand and ridden work with the Equiband® for 20 minutes per day/4 days per week at the beginning of the horse's normal exercise routine
- Week 4: In-hand and ridden work with the Equiband® for 30 minutes per day/3 days per week



# The GENUINE Equiband® System Research

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Three-dimensional spinal motion was recorded at the beginning of the study (baseline), and following the 4-week program (final). The measurements were collected with and without the Equiband®, with the horse trotting in-hand and on the lunge. The researchers found that with use of the Equiband®, horses had reduced spinal movements in the wither and mid-thoracic/lumbar regions (the area under and just behind where the saddle would sit). Following the 4-week exercise program, rotational movement in the withers and thoracic region decreased, while dorsoventral (up and down) movement of the thoracic spine increased. The results of this study indicate that the Equiband® system reduces movement of the spine during trotting exercises, indicating an increase in dynamic stability.

**Citation:** Pfau, et al. 2017. Effect of a 4-week elastic resistance band training regimen on back kinematics in horses trotting in-hand and on the lunge. *Equine Veterinary Journal*

A second study performed by veterinary physiotherapists in Sweden found that use of the hindquarter Equiband® stabilized the thoracic and lumbar areas of the spine during in-hand walking and trotting exercises. Improved stability of the thoracolumbar region is thought to improve working posture and promote core stability.

**Citation:** Stenfeldt, Ericson, and Jacobson. 2016. The effect of an elastic resistance band around the hindquarters on equine dorsoventral back kinematics. *Acta Veterinaria Scandinavica*

## The GENUINE Equiband® System Research

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### Rehabilitation program featuring the Equiband® System assists with recovery from neurologic dysfunction

Individualized rehabilitation programs (including the Equiband® System) can help horses to recover from neurologic dysfunction.

Following an outbreak of the neurologic disease, equine herpesvirus myeloencephalopathy (EHM), veterinary scientists in Sweden sought to determine the benefit of individualized rehabilitation programs for horse recovering from the disease.

Four horses with severe EHM were hospitalized during the acute phase and recovered. Three months following the outbreak, the horses began a rehabilitation program to return to previous fitness levels.



The rehabilitation programs focused on improving coordination, proprioception, core stability and balance, strength, and conditioning. The methods used included pole work, dynamic stabilization exercises, balance pads, exercise and conditioning, and work with the Equiband® System.

All horses included in the study returned to normal levels of attitude and fitness as determined by their owners by 6-8 months following the outbreak. Within 8-11 months **all horses had returned to previous level of activity.**

**Citation:** Ericson & Lassa. 2020. The effects of a 1-year individually adapted rehabilitation programme in horses with neurological dysfunction caused by EHV-1/EHM. Equine Veterinary Journal.

# The GENUINE Equiband® System Research

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## Rehabilitation exercises featuring the Equiband® System strengthen spinal muscles and improve posture in horses

Core strengthening exercises (including handwalking with the Equiband® System) have been shown to strengthen spinal muscles and improve postural stability. This is critical for rehabilitating horses returning back to work and to prevent future injury.



A study performed by veterinary scientists at Colorado State University investigated the effects of a 3-month rehabilitation regimen in lame horses. The regimen included handwalking with the Equiband® System, standing on balance pads, and dynamic mobilization exercises.

The multifidi muscles along the vertebrae of the spine are important for postural stability in horses. It is thought that following periods of inactivity (such as stall rest due to lameness), these muscles can atrophy which leads to reduced stability of the spine and increased postural sway.

This team found that a rehabilitation program strengthened the multifidus muscle along the spine (increase its size) and resulted in increased postural stability (decrease in postural sway) in 12 horses recovering from lameness.

These important findings support core strengthening exercises (including handwalking with the Equiband® System) can strengthen important spinal muscles, improve postural stability. These outcomes are important for returning rehabilitating horses to full exercise and avoiding future injuries.

**Citation:** Ellis & King, 2020. Relationship between postural stability and paraspinal muscle adaptation in lame horses undergoing rehabilitation. *Journal of Equine Veterinary Science*



# The GENUINE Equiband® System

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## **Warning**

Equiband® should only be incorporated into ridden work when the horse is fully accustomed to the feeling of Equiband® (as outlined in the step-by-step fitting instructions). Carefully check the tension as over- or undertension of Equiband® will not promote the desired core strengthening effect.

Failure to take due care may lead to serious accidents or injury. Always wear a helmet when riding with the Equiband® system. Equiband® is not for use on horses with an undiagnosed lameness or clinical condition. When in doubt, veterinary advice must be sought.

## **Disclaimer**

Neither Equicore Concepts nor any authorized distributor or retailer of the Equiband® system will be held liable for any personal accident, injury or damage resulting from the use of the Equiband® system. Full responsibility lies with the individual who chooses to use the Equiband® system for the horse under his or her care.