#### CHAPTER EIGHT

# **Balance** Issues

# Understanding Balance Improves It

All horses, despite their seemingly effortless beauty in motion, have some inherent balance problems that are both longitudinal and lateral in nature.

Longitudinally, or from back to front, the horse has a natural balance problem simply because his neck protrudes from his otherwise table-like structure; his balance is innately on the forehand. To counter this issue, you need to help the horse build topline muscles so he can carry himself well and move more easily. The horse's second longitudinal balance issue exists because he is a four-legged creature: When left to his own devices, he's always eager to use his front legs and is somewhat "unconscious" about his hindquarters (fig. 8.1). This also puts the horse out of balance and onto the forehand. Riding half-halts and transitions

**8.1** By nature, the horse's forelegs are more eager than his hind legs. Under saddle, the rider does half-halts and asks for transitions that encourage the hind legs to be more responsive and they encourage the forehand to wait.

can help both situations.

*Laterally,* or from left to right, the horse isn't straight by nature. Because his hindquarters are wider than his shoulders, his natural balance is, once again, on the forehand (see fig. 8.6, p. 100).

Straightening the horse is easy in theory but sometimes difficult in practice. For now, let's look at the longitudinal issues. Think of your horse's hindquarters and his forehand as his two engines—one for pushing and the other for pulling.



# Longitudinal Balance Engines for Pushing and Pulling

Your horse's forehand engine wants to *pull* your horse along. It's the *pulling engine*. This engine is important, but when it does too much pulling, the hind end becomes like a wagon trailing along behind a tow vehicle (fig. 8.2 A). Because your horse naturally wants freedom of the forehand, he prefers to use this front-end engine more than his hind engine. He doesn't realize that overusing his forehand puts too much weight on it, which actually reduces his freedom. As soon as the horse takes a step with the front end, without bringing his hindquarters along the same amount, he becomes a bit long in his frame, hollow in the back, and unpleasant in the hand. The horse needs his rider to explain that *real* freedom from improved balance comes when he uses his hind end more and his forehand less.

You want your horse's hind-end engine to push your horse along, which creates



a connection from his hindquarters to the bit (fig. 8.2 B). The *pushing engine* has to create enough energy to make that connection. The energy has to get *all the way* from the horse's thrusting hind leg, through the horse's topline, to his reaching poll, and to the bit. Then it can lift and free the front end—your ultimate goal.

**8.2 A & B** (A) The hindquarters, when left to their own devices, sometimes act like a trailer being dragged by the forehand.

(B) When the hindquarters are the driving force causing the horse to cover ground, it has the effect of lifting the forehand.

#### The "Faux" Runaway

As you know, horses don't inherently know that the way to gain freedom is by energizing the hindquarters, rather than the forehand. Fresh young horses or hot older horses are a tough test for the rider's balance as their enthusiastic front legs want to carry the forehand away from the lazy hindquarters. They pull the center of balance forward and away from the rider's seat—the seat that connects the rider to her horse's hindquarters.

The rider feels that her horse is running away, so she's amazed when her trainer says her horse's hindquarters look lazy. The feeling is misleading because the surge

of energy is actually very real, but it's caused by the front end that's running away from the snoozing hind end. It's often even an experienced rider's tendency to use prolonged restraining aids with this horse, but that never works.

Years ago at the Aachen Horse Show, one of the American riders was in this situation. Her horse was very hot, and she was persistently trying to quiet and relax him. Her German trainer came along and told her to go for a gallop. Although the rider was horrified at the prospect, that was just the answer to her problem. It got the horse's hind end in gear so the energy that reached her hand came from the hindquarters instead of the forehand. As a result, the horse was very successful in the competition. The American rider retained her horse's enthusiasm for working, but gained control over the whole horse from behind.

When your horse is too strong and you can't (or don't dare to) gallop, do movements in which your leg is required to activate the hindquarters. Find a way to ride your horse from *back to front*. Make turns-on-the-forehand and do leg-yield. If you and your horse know how, do movements such as turn-on-the-haunches, shoulderin, travers (haunches-in), renvers (haunches-out), and half-pass. Also do transitions between these movements. Do things that require you to use your seat and leg, and use your hands last—and only when you need to. Each time you communicate with your seat and leg more, you need your hands less. Then he will listen to your seat and legs more, and work more from his hind-end pushing engine. To get your horse's hindquarters in gear, do Exercise 1 at the end of this chapter (p. 102).

# Thrust, Reach, and Engagement

When you ask your horse to use his hindquarters more, what exactly do you want him to do? When that's clear to you, it can be clear to your horse too. The horse's hind leg sequentially does three things:

- It *thrusts* off the ground...
- then it *reaches* under his body...
- then it *engages* or carries weight when the hoof is flat on the ground.

Thrust is pushing power. Reach is the direction and amount (left, right, and forward) of extension. The reach determines where the hind leg lands—ideally, under your center of gravity, which should be directly over your horse's center of gravity—

where two spines meet. Then your horse's hind foot is in a position to engage (carry weight) and support you both perfectly. In this situation, the rider feels she's being carried, and her seat can be very influential.

When the rider understands and can utilize the dynamics of *thrust, reach,* and *engagement,* it makes the difference between good and great because it clarifies, in your mind, what exactly you want the horse to do with his hindquarters. You don't blindly want "more." You want something specific: thrust, reach, or engagement. Sometimes you want more than one of these qualities, but you should know what you want and why. Let's look at each closely.

#### Thrust

The energy from each *thrusting* hind leg follows pathways that arc with positive (supple) tension from each thrusting hind leg to the bit (fig. 8.3 A). The horse steps:

• From his left hind leg through the left side of his body, through the poll to the bit in your left hand; this is one unilateral pathway.

• From the right hind leg through the right side of his body, through the poll to the bit in your right hand; this is the other unilateral pathway.

These are two pathways of "throughness." They go all the way through the horse's body, to the bit. To work, there must be enough energy thrusting from each hind leg to reach the bit. "The bit" is, in fact, a very small place, but ideally, the rider should feel the result of a forward seat/leg aid land softly in her receiving hand. It feels like a commitment. It's not easy to send just the right amount of energy through a specific path



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8.3 A-C The horse's hind leg does three things:
(A) It thrusts, sending energy through the topline to the bit. (B) It reaches, ideally to a place directly under the rider's center of gravity where two spines meet. (C) Finally, it engages or bends and carries weight. Then it thrusts again.

to such a small place, but transitions help the horse to remember to push away from the bit and make a circle of energy.

The rider shows her horse exactly where the pathway of energy should go as she plays with the horse between the forward aids or upward transitions, and half-halt aids or downward transitions. These transitions and half-halts balance the horse from back to front and front to back between the "Go" aid and the "Whoa" aid. As the rider improves her responses to the "Whoa" button and the "Go" button, she improves her horse's longitudinal balance in the process.

When the energy from each hind leg is equal and directed properly, the horse is straight. The energy going through the horse's body builds a bridge of muscle that carries the rider.

This topline bridge is further strengthened and straightened by the horse's sending energy on a very slight diagonal line. When the rider uses her inside leg toward the outside rein (diagonal aids), the energy from the horse's thrust travels diagonally and goes:

- From the left hind toward the right side of the bit on a diagonal pathway or...
- from the right hind toward the left side of the bit on the other diagonal pathway.

In summary, there are four forward-moving pathways of "throughness":

- 1 Left hind to left bit.
- 2 Right hind to right bit.
- **3** Left hind to right bit.
- 4 Right hind to left bit.

What does the hind leg do after it thrusts? It reaches.

#### Reach

You want your horse to *reach* with his hind legs so he steps directly under your center of gravity—under the place where two spines meet (fig. 8.3 B). Then he carries you in a balanced way. When you're able to influence your horse's direction with your weight and leg aids as described in Exercise 1 (p. 102), you can influence the direction of your horse's reach. When the horse reaches so that he steps *outside* (to the left or right) and/or *short* of the ideal point, the rider will feel as if her horse is pushing himself away

from her seat. The rider needs control over how far forward the hind legs step, and whether he steps to the left or the right, or is straight.

How does the rider get that control? On a front-to-back plane, she balances her horse between the "Go" aids and the "Whoa" aids. With the "Go" aids, she asks for more reach, and with the "Whoa" aids, she asks for less. Exercises to help the rider gain control over the amount of forward reach include stretching in different frames (see "Elastic Frames" on p. 109), transitioning within or between gaits, and using halfhalts. These exercises give the rider control over the reach of the hind legs from back to front.

But, what about left to right?

Most horses carry at least one hind leg *outside* the center of gravity—too much to the left, or more commonly, too much to the right. Exercises using movements such as shoulder-in, travers (haunches-in), renvers (haunches-out), and half-pass increase the rider's ability to position the horse's hind feet more to the left or more to the right. Shoulder-fore (see p. 100) asks the horse to step directly under the horse's center of gravity. Experienced riders try to achieve this all the time, so for that reason, it's not really an exercise: You want to ride your horse in shoulder-fore all the time.

To position the hind feet precisely, the rider must have extreme control over the line of travel. In a benign way, your horse always does his job in the easiest way, and it's easiest for him to misalign his shoulders or hips and avoid reaching to the place where he carries the most weight. The exact placement of a hind foot in shoulder-fore isn't easy, but once your horse understands, he'll be very willing because he loves feeling balanced (see Exercise 2, "Connect Your Horse in Shoulder Fore"—p. 104).

After your horse's hind leg reaches, it lands, and it carries weight or *engages*.

#### Engagement

When your horse steps directly under the place where two spines meet, he *engages* in an ideal way—that is, he places his foot in a place where he can most easily carry his weight and yours: under your center of gravity (8.3 C). In the beginning of the horse's training, or during the warm-up of an educated horse's ride, this "engaging moment" causes a connection. The rider can feel this connection in her seat and back. When a horse is fit, strong, and educated enough to be collected, even more weight is transferred to the hindquarters from the forehand, and the rider can feel the horse get lighter in the hand. But how does the rider connect the horse and transfer weight

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back? Half-halts and downward transitions cause the horse to "push away from the bit," transferring weight to the hindquarters. I discussed this earlier in the sidebar on page 46, but here is more information about this important concept.

### Pushing Away from the Bit

In the *thrusting* and *reaching* moments, the horse's energy flows through his topline. When that wave of energy reaches the bit, instead of "leaning" on it, your horse should yield to the contact by "pushing away" from (or "bouncing off") the bit, shifting weight to the hind legs so that he comes into self-carriage and becomes light in your hand as a positive result (fig. 8.4).

Pushing away from the bit happens every stride as a natural result of good riding. It recycles the energy making the work easier for both horse and rider. Although pushing away from the bit is nearly imperceptible to the spectator,

the rider can feel it. Search for that feeling and you'll find it. It's the ultimate in correct connection, as the horse remains totally committed to the bit but light in the hand.

When the horse pushes away from the bit, his throatlatch is soft and open. The attitude of his poll is reaching. This flexible and reaching attitude of the mouth and poll is a requirement. When the horse doesn't compromise this flexible reaching attitude of the forehand in motion, half-halts influence the hindquarters. However, if the horse compromises his reaching-to-the-bit attitude when the rider half-halts, his frame will shorten in front instead of closing from behind. It should be noted that there are times when the horse doesn't respond to the half-halt, and the rider needs to use a stronger half-halt. This stronger half-halt will shorten the neck briefly, but once the connection is made and the half-halt goes through, the rider softens and the neck reaches again.

Ultimately, at the highest level, a dressage horse should be able to go from extended trot to piaffe without many rein aids. The jumper needs to cover ground at high speed and then gather himself in a forward way to jump a high fence. In both cases, the rider makes a downward transition from extension to collection in an *upward* way; the rider collects her horse in a *forward* way. That's not possible when the horse doesn't push away from the bit and there isn't a circle of energy. One of



8.4 When the horse is accepting the contact in an ideal way, he "pushes away from the bit." Follow the arrows to see how the energy recycles: First, at the moment of thrust, the energy goes from the horse's pushing hindquarters up through the rider's Vertical Powerline. Second, as the horse's hind leg reaches forward, the energy goes forward through the Connecting Powerline-that is, from the rider's elbow to the bit. Third, when the energy reaches the bit, the horse pushes away from it and transfers weight from the bit to his grounded, engaging hind leg, which improves his self-carriage. Then the horse thrusts off that grounded hind leg again, sending the energy back up through the rider's Vertical Powerline. In this ideal balance, the energy continues recycling.

the greatest keys to learning to ride at the highest level is in developing the ability—in rider and horse—to use the circle of energy to do half-halts and downward transitions with this "upward attitude" because the horse pushes away from the bit. Later I'll talk in detail about transitions and half-halts, but let's look at that briefly now, because it's what makes pushing away from the bit possible.

# Half-Halts and Transitions for Coordinating and Connecting

Half-halts and transitions are the rider's primary tools to balance the horse. They coordinate the front-pulling engine and the hind-pushing engine by *connecting* the two engines, and when half-halts and transitions transfer weight to a hind leg, they *collect* the horse. As you work on making your half-halts effective, remember to use your Powerlines. They enable the aids and they make soft aids effective.

#### Half-Halts

Trainers have always had trouble explaining how to do a half-halt because "half-halt" can mean so many different things. The complicating factor is that half-halts come in all sizes and shapes. For example, the half-halt can mean:

- Balance under me in shoulder-fore left (or right).
- Balance under me so I can shorten the stride in preparation for a transition from trot to walk.
- Balance under me and gather yourself in preparation for an extended trot.
- Balance under me to half-pass right—and stay in front of my inside leg so you don't make the common mistake of losing balance and going onto the forehand.
- Balance under me in preparation to jump this fence.

Are you getting the idea? The half-halt can mean hundreds of things, but it always means, *Balance under me—where two spines meet.* And there's a recipe for that. The generic half-halt recipe is always, "Go", "Whoa," "Soften." Your aids say:

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• *Go* to the pushing engine that often wants to snooze. Your Vertical Powerline asks the energy from the hindquarters to connect to the bit.

• *Whoa, stay under me* to the pulling engine that is often too eager. Your Vertical Powerline pushes against or sits against your fixed hand (you may also need to close you fingers) to achieve this. As you know from Part I, your hand rarely comes back and shortens the neck. Rather, your Vertical Powerline pushes into and *connects* to the hand that stays forward.

• *Balance on your own*. You soften the aids. The rein aids don't give the horse anything to lean on or brace against, and he's free to balance and carry himself. The leg aids also soften. You should never be holding on to your horse or gripping his rib cage. Otherwise, your horse would experience your leg in the same way that he experiences the girth—certainly not something to respond to!

The rhythm of the half-halts is the same as the clock-like rhythm of your horse's gait. When the energy from your horse's hindquarters goes "through" his whole body, very small aids influence the entire horse in his rhythm.

An adequate pushing engine together with connecting half-halts prevent the front end from running away and help the hindquarters balance and carry as much weight as is appropriate for the horse's level of training.

#### Transitions

Transitions do exactly the same thing. Upward transitions ask the pushing engine to *thrust* and *reach*, sending energy through the horse's back to the bit. Downward transitions ask the horse to push away from the bit and engage or add weight to one hind leg or the other. Transitions and connecting half-halts coordinate your horse's two engines in a circle of recycling energy.

# The Circle of Energy and the Circle of Aids

As you connect your horse's two engines, you're sometimes asking for forward energy and sometimes bringing your horse back. These aids are usually very small and come close together in the rhythm of your horse's gait. Feel for the self-perpetuating *circle* 

*of energy* that builds your horse's bridge of muscle over his topline (see pp. 90–91). As you know, the energy goes from the horse's thrusting hind foot, through the topline to the bit. Then the horse pushes away from the bit and that energy returns in the form of weight to an engaged hind leg—ideally, under the place where two spines meet.

The rider's aids "ride" on this perpetual circle of energy, making a "circle of aids" or a "circle of influence." Try to feel it ongoing, like a song in the rhythm of your horse's gait. Every stride there's a tiny encouragement to the hindquarters, a tiny shaping aspect to the aid, a tiny confirmation of the balance, and a tiny soften. It's invisible to all but the very educated onlooker.

When the horse is connected from back to front and from front to back, the energy goes around and around ("through"). As you go from canter to trot to walk and back to trot and canter, you change the rhythm, but the circle of energy stays the same. You don't want your horse to stop and then start all over again in the new gait. You want to feel that he uses the same energy for walk as for trot and for canter, which makes the transitions seamless. When the energy returns to the hindquarters, his engine still turns at the same speed—like the wheel on a paddleboat keeps going.

For the circle of aids to work effectively and efficiently, the "Go" and the "Whoa" need to work equally. The horse "thrusts forward" and "balances back" every stride in repetitive motion like the predictable rock of a rocking chair.

#### **Try This**

Imagine an empty rocking chair. With your hand, set your imaginary rocking chair in motion. It rocks forward and back equally in a self-perpetuating way, *until* you need to remind it with another push from your hand. Your horse is the same. The forward-thrusting motions and the engaging-back motions of your horse balance him when they are equal. This recycled energy is self-perpetuating, but like the rocking chair, you need to remind your horse to keep it going. If you ride in a clock-like way with this in mind, you'll immediately know which is weaker: the forward or the back. When you're able to monitor your horse's longitudinal balance in this very fine way, you need frequent but very small aids.

Many horses have some degree of engagement avoidance and some degree of forward avoidance. When the rider is able to recycle the horse's energy and has the feeling of the rocking chair going back and forth, she can usually feel the moment when the horse avoids either engagement or thrusting, and she can usually prevent that from happening.

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### **Engagement Avoidance**

In a benign way, horses would rather work without working too hard. Here's how they avoid engagement:

• *Laterally*, they swing the hindquarters or shoulders in or out (fig. 8.5 A). Riders who work on keeping the horse's body parts aligned on the line of travel get improved engagement and collection from their horses because they're straight (aligned).

• *Longitudinally*, some horses leave the hind leg on the ground too long, and these horses are in a "sprawled" position by the time they thrust off the ground with it (fig. 8.5 B). In this case, it helps for the rider to encourage the horse's hind leg to pop off the ground sooner by giving a quicker aid.

• *Longitudinally*, some horses pop off the ground with the hind leg too quickly, which puts weight onto the forehand (8.5 C). These horses are croup high. In this case, the rider needs to prolong the weight-bearing moment of engagement with half-halt aids.

## Forward Avoidance

Some horses lose the forward flow. An honest connection between the rider's seat, leg, and hand is crucial. When the rider uses the seat and leg, the horse must step toward the hand and accept contact with the bit. That's the rule for riding horses. The leg is like a ringing telephone: The horse must respond by stepping toward the bit in the same way that we would pick up a ringing phone and say hello.

Riders would do well to realize that the word "forward" can have various meanings that are actually quite different. When a trainer says, "Go more forward!" does she mean:

- Take longer strides?
- Take quicker strides?
- Add energy?



**8.5 A-C** The horse can avoid engaging and carrying weight in three different ways: (A) He can swing his hindquarters in or out; in this case, he stops stepping under his center of gravity and puts his weight on the forehand.

(B) He can leave his hind legs on the ground too long, which makes his frame long and, again, puts his weight on the forehand.

(C) He can pop his hind legs off the ground too quickly, making his croup high and, again, putting weight on the forehand.

Know what you want from your horse, and as you read further, you'll know how to ask for what you want.

Establishing workmanlike gaits is the purpose of the Training Level dressage tests and is a goal in the basic training of every horse in every discipline. The horse should go "forward in a clear and steady rhythm." The rider's *shaping, listening,* and *action aids* need to blend within this clock-like, reliable, rhythmic forwardness. When the rider's body absorbs the motion of her horse, and she is consistent in the tempo of her aids, the horse's body is encouraged to sing the same song and harmonize with his rider. (For more about the tempo of the aids, see p. 165.)

### Activating the Hindquarters

An *activating* aid mobilizes and quickens the hindquarters with a little rat-a-tat from the calf or the whip. It's different from a *driving* aid that can have the effect of sending the horse forward and flat. It is used to enliven and quicken the hindquarters. It eagerly speaks to those hind legs and says, *Come on, come on! Are you ready? We're going to do something fun!* It's often necessary to activate and quicken the hind quarters at times when they are inclined to get slower, such as in corners or on small circles. Activating the hindquarters helps to change their mechanics from "pushing" off the ground to "carrying" the weight with a higher, more active step. It causes a change in the angle of the horse's pelvis, changing his shape longitudinally. At the same time, if the horse is aligned, the mechanics of the forehand changes, too. The front legs change their mechanics from "pulling" to "lifting" the forehand.

Normal riding accomplishes this changing of the mechanics of the forehand and hindquarters too, but the activating aid specifically encourages the horse to carry more promptly so the front-pulling engine starts to lift the torso. This activation of the hindquarters greatly assists in encouraging a horse to collection. Sometimes, when the rider activates the hindquarters, the horse initially becomes croup high, but in time, he learns to respond by lowering the hindquarters because the hind legs bend, which directly makes the croup lower. Turns-on-the-forehand and turns-on-thehaunches are exercises that directly help the rider to activate the hindquarters and encourage prompt responses from the hindquarters without covering more ground. Your horse will be in front of the leg and ready for action.

## The Predictability Factor

When your horse's rhythm is reliable, there is no avoidance. The rhythm and tempo (speed of rhythm) are as predictable as the rhythm of a song. Be sure that *your* rhythm is just as reliable as his so your aids happen in the right tempo. Some riders ride too fast, but many ride too slowly. The clear and steady rhythm is self-perpetuating, and this predictability factor builds relaxation and mental confidence for both horse and rider.

There's something great about knowing what's going to happen next. So, I'm not simply talking about balancing your horse physically. *Mental* balance goes hand in hand with *physical* balance. When you and your horse both know what's going to happen next, you have mental and emotional peace of mind. When your body knows what's going to happen next, it can become even more metronome-like. That's Dressage Dynamics: the horse-and-rider working machinery that recycles energy automatically. In this state of "throughness" and harmony, the rhythm improves, your horse's back swings and he builds strong back muscles—a requirement for longitudinal balance and correct collection.

Now let's look at your horse's lateral balance issues. As you know, he isn't innately straight and this makes him unbalanced. He'll never solve this alignment problem on his own, but you can help him solve it (see p. 69).

# Lateral Balance

When the horse is unbalanced *laterally*, he can fall left or fall right. When on a circle, or a bent line, we say the horse "falls in" or he "falls out." However, if he's balanced left to right and right to left, he can follow your very specific line of travel through straight lines and perfectly accurate bent lines. To follow a normal line of travel that's straight in some places and curved right or left in others, success is all about "bendability." Even when the horse isn't traveling on a bent line, his body should always have the ability (be ready) to bend and the ability to turn. Horses learn to balance laterally (from inside-leg-to-outside-rein aids) on a circle, and then when you go straight, the horse retains that bendability, balanced on the outside rein.

## The Straightness Issue

When the horse can bend equally left and right, he's supple and straight. But, remember, horses are born challenged in the straightness department. Your training goal is to straighten him so that each hind leg carries an equal amount of weight and sends an equal amount of energy straight through the body. That sounds easy, but the plot thickens for two reasons:

• The horse's hips are wider than his shoulders (fig. 8.6). As a result of these wide hips, when left to his own devices, the horse will go down the track with his haunches "in," and his shoulders in the unfavorable position of "out."

• Horses are one-sided like people. The one-sided horse is physically crooked, which prevents the energy from flowing equally from the hind legs to the bit. Most horses have a left hind that carries more weight than the right. The right hind leg is inclined to step slightly to the right instead of narrowing to step underneath his weight—the place where two spines meet. As a result, the thrust of that right hind foot sends the

8.6 By nature, the horse is wider

in his hips than he is in the shoulders. Left to his own devices, the horse's wide thrust from behind

is inclined to throw his weight

the rider can help her horse step under his center of gravity

by narrowing the hind legs in

shoulder-fore.

onto the forehand. Under saddle,

horse's left shoulder out, causing him to lean on the left rein and take too little contact with the right rein. Some horses are onesided in the other direction, but either way, a "crooked" horse can't step straight forward through the back to the bit longitudinally without guidance from his rider.

# The Shoulder-Fore Solution

The problem is solved when the hind leg that is thrusting in the wrong direction can be narrowed to step under the center of gravity and bear weight (fig. 8.7). The rider narrows the inside hind leg (with her inside leg) so it steps in the track between the two front feet, and the outside hind aligns with and steps in the same track as the outside fore. The primary diagonal aids are inside leg to outside rein. The opposite diagonal aids are active only when needed: The inside rein asks for a little inside flexion and the guarding, outside leg prevents the outside hind from going out.

The discerning rider rides her horse in shoulder-fore all the time so he's straight and bendable to either left or right. When

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**8.7** Mica works to narrow the footfall of Infanta's hind legs by doing shoulder-fore. The mare is slightly flexed left here, which identifies the left as the "inside." Mica rides from the inside leg to the outside rein, and she asks the inside (left) hind foot to step directly between the forefeet and under the place where two spines meet—under her center of gravity. Infanta's outside (right) hind needs to stay aligned with the outside fore.

the bridge of muscle is strengthened equally to the left and the right, it is straight and strong. That's the perfect situation for developing collection.

Avoid these common problems with shoulder-fore:

• Some riders ask the horse to go sideways. Remember that shoulder-fore is a straightening exercise without lateral tendencies.

• Some riders *bend* the horse's neck. There should be slight *flexion to the inside* at the poll so the horse is *bendable*, but the neck should be almost straight.

To balance your horse in shoulder-fore, do Exercise 2 on page 104. You'll find a steady, self-perpetuating rhythm and relaxation with a nice feel in your hand.

## "Throughness"

When the horse is longitudinally and laterally balanced, his energy goes through his entire spine freely and it recycles; then we say the horse is "through." The USDF definition of "throughness" tells us that the energy flows not only back to front but also front to back in a complete circle of energy, so the rein aids influence the hind legs. Do

# USDF Definition of "Throughness"

hroughness" is the supple, elastic, unblocked, connected state of the horse's musculature that permits an unrestricted flow of energy from back to front and front to back, which allows the aids/influences to freely go through to all parts of the horse (e.g., the rein aids go through to reach and influence the hind legs.) "Throughness" is synonymous with the German term "*Durchlaessigkeit*," or in English, "throughlettingness." Exercise 3 on page 104 to help develop "throughness."

#### EXERCISES

## EXERCISE 1 Get Your Horse's Pushing Engine in Gear

**Directions** To get your horse's pushing engine in gear, start from the moment you walk out of the barn with your horse in hand. Do you have to pull him out by his face, or does he step smartly from his hind legs and walk next to your shoulder? He might need to be asked with a cluck or a tap from your whip.

**Step 1: Walk in Hand** Ask your horse to give you the same walk that you will expect when you're sitting on him (fig. 8.8 A). While walking in hand, his only restrictions are the weight of the saddle and bridle. (When you mount, no matter how skilled you are, your weight is an additional restriction.

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Ideally, you want the energy stepping through his back and to your hand before he has this restriction.) Your horse's walk should convey a quiet workmanlike attitude. When you have a self-perpetuating, relaxed walk, get on. Many top riders hand walk their horses for 10 or 15 minutes before mounting.

**Step 2: Mount and Walk on a Long Rein** Walk on a long rein (if it feels safe). Be sure the pushing engine is still in gear given the added restriction of your weight (fig. 8.8 B). Carry your own weight in a balanced way so your horse's body won't be inclined to become like a hammock. If you have a mirror in your arena, walk parallel to it and ask yourself: *Why are we covering ground? Is it because of the front-end pulling engine or the hind-end pushing engine?* 

Listen to the rhythm of the four-beat walk. When he's balanced, your horse takes energetic steps from behind that are deliberate and self-perpetuating, but not hectic. Feel the energy flowing under your seat. When he's stepping "through" his body, you can steer him easily with your body. Give yourself a steering test by riding simple figures and diagonal lines without rein contact. (Repeat Exercise 1 on page 64.) Leave your hands on the withers and point him on your line of travel with your eyes, shoulders, hips, knees, and toes, and step in the direction you want to go. He'll follow your weight and reach in that direction.

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**8.8 A & B** (A) Before Annie mounts, she hand walks Forte to warm up his hindquarters and get him moving from behind.

(B) Annie mounts and rides in a fairly free walk. She waits for the hindquarters to work in a self-perpetuating way.







(B) In the working trot, Annie tries to maintain the balance in shoulder-fore.

## EXERCISE 2 Connect Your Horse in Shoulder-Fore

**Directions** If you were successful with Exercise 1, you got your horse's pushing engine in gear and were able to steer without reins. This next exercise helps you connect your horse's engines by doing upward and downward transitions with half-halts in shoulder-fore.

**Step 1** Shorten the stride and put your horse on the aids. Half-halt to rebalance him from behind into a shorter frame. This shorter frame invites you to shorten your reins. Channel your horse in the shape of shoulder-fore: The inside hind steps into the space between the two front legs (fig. 8.9 A). Keep the outside hind in alignment with the outside fore. Ride straight toward a mirror if possible so you can monitor your horse's shape. This is difficult, so be quietly persistent.

**Step 2** Do forward-and-back transitions in the walk: Go from a free walk on the diagonal, back to a medium walk before the corner and through the short side and the next corner. Then do a free walk on the diagonal again. These transitions show your horse exactly how to respond. Ride from inside leg to outside rein in shoulder-fore, which balances him on the outside rein and helps him relax.

**Step 3** Do shoulder-fore in trot and in canter (fig. 8.9 B). Shoulder-fore is difficult but persist quietly. When you're successful, your horse will give it to you more readily, because he likes to be balanced too!

# EXERCISE 3 Transitions for "Throughness"

**Directions** Everyone knows how important it is to balance the horse on the outside rein, but very few riders are persistent enough about it to actually achieve the goal of "throughness." If you don't have a dressage arena, map out a 20-meter circle in your riding area. Although it's not important that the circle be exactly 20 meters, it *is* important that it be an exact circle because you want every stride to be the same.

how horses work

Find the center of your circle, and pace off 10 giant steps in four opposing directions. Mark these points with cones. This gives you an exact circular pathway that gives your horse a cylindrical shape to his body that balances him on the outside rein (fig. 8.10).

**Step 1** Point your horse's nose exactly on the line of travel. Then, with your seat and legs, shape your horse's body like a banana on the arc of your circle. Do a working trot three-quarters of the way around, then walk one-quarter. Repeat while you help your horse find a consistent, balanced rhythm and frame in shoulder-fore. Try to keep the same feel in your hand. To ask for walk, keep your hands steady and push quietly against them. Your horse should keep reaching for the hand that stays forward. That will cause him to close his frame a little from behind while keeping the neck long. If the connection is lacking:

- Try using your inside leg with more ambition than you think you need. This helps position his inside leg under the center of gravity and it commits him to the outside rein.
- If the contact is too light or noncommittal, use your upward transitions to push him more forward.
- If he's too forward for the balance, use your halfhalts and downward transitions to ask him to stabilize the balance. Sometimes make a transition to halt, or to halt and turn-on-the-forehand, so he learns to stay under your seat and carry more weight with the hindquarters.

**Step 2** When he's balanced under your seat, where two spines meet, he'll feel nice in the hand. Repeat the exercise in the other direction: Trot three-quarters and walk one-quarter.

**Step 3** Then do it with canter-trot transitions, too. Retain the shoulder-fore position at all times. Canter for three-quarters and trot for one quarter. Do straight lines sometimes, as well. **8.10** Mica rides Infanta from the inside leg to the outside rein on a precise circle to develop "throughness." The cylindrical shape of the outside of the horse's body is a sign of "throughness."



**Step 4** Mark off a precise 15-meter circle somewhere else and incorporate that into your riding. Change directions often. Soon you'll refine the invisible "Go" and "Whoa" aids until you know exactly how much you need to help your horse stay connected and balanced. He'll give you a steady, self-perpetuating rhythm in relaxation and with a nice feeling in your hands.

# Essential Information about the Horse's Balance Issues

• When left to his own devices, the horse is always eager to use his front legs and somewhat unconscious about his hindquarters. This puts the horse out of balance and on the forehand.

• The rider can help by thinking of the horse's hindquarters and his forehand as his two engines—the hindquarters are for pushing and the forehand is for pulling.

• The rider can help her horse coordinate his two engines for a better balance with halfhalts and transitions that slow down the forehand and encourage the hindquarters.

• The horse isn't "straight" by nature. And, because his hindquarters are wider than his shoulders, his balance is, once again, naturally on the forehand.

• The rider can help her horse's balance with shoulder-fore, which narrows the wide hindquarters and helps the horse step under the center of gravity.