

Body Weight Support Training

Patient Set Up Guide + Tips and Tricks

How to Use this Set Up Guide

- This guide is designed as a "quick read" visual manual – <u>GlideTrak Manual</u>
- The guide is to be used with the GlideTrak Video Training Library
 - Video Training Library
 - Password = "Welcome"
 - Direct video links are provided in the guide





Learning to Use GlideTrak

<u>Therapists</u>

- GlideTrak set ups are not difficult to learn but it does take practice to become proficient
 - **Set yourself up to better understand set up dynamics**
 - Practice setting up piers or highly compliant patients
- There is no "perfect" set up, so don't over adjust
 - If the patient is achieving their task and is not complaining, save any adjustment for the next session
- The set up tips and tricks are very helpful but mastering them all is not mission critical



Learning to Use GlideTrak

Patients

- Most all patients take to the GlideTrak well and see results almost immediately!!
- Some patients may be nervous about using the GlideTrak or may take longer to "Get It"
- Show patients your confidence in the GlideTrak
 - Focus patients on the positive results they will achieve
 - Ask patients to use their best "Can Do" attitude
 - Demonstrate to patients that they cannot fall



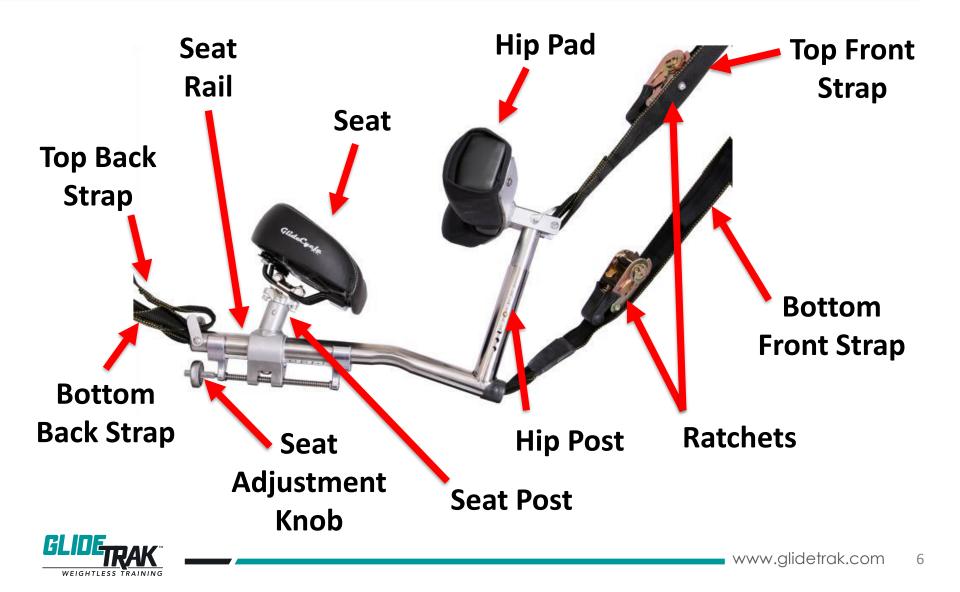


Safety First

- Client falls while mounting and dismounting the GlideTrak are the biggest safety risk
 - Carefully spot patients during mount and dismount
 - Place safety straps on patient immediately upon mount and remove only when the patient is ready to dismount
 - Use the upper body harness and 3:1 lift for balance challenged patients
- Be careful when restoring a patient's weight
 - Make sure their feet are underneath them and their knees are locked and ready to accept their weight
- Use the assisted through the legs mount (vs step over methods) for unsteady and balance impaired patients



Saddle Assembly Nomenclature



Set Up Basics – Strap Settings

Top Front Strap - at Chin Level

Bottom Front Strap - <u>2 Holes</u> <u>Below</u> Top Front Strap







Top Back Strap - 2-3 Holes Above Bottom Back Strap, <u>ALWAYS LOOSE</u>

Bottom Back Strap - <u>Wrist</u> <u>Level</u> When Arm at Side



| Set Up Basics – Saddle Settings

Hip Pad Position: On Hip Bones, not the Abdomen



Seat Position: <u>At or Above</u> <u>Gluteal Fold</u>

Hip Post - <u>Slightly</u> Forward of Vertical



Set Up Basics – Tips & Tricks



Rotate Hook 90 and Angle Forward to Insert or Remove

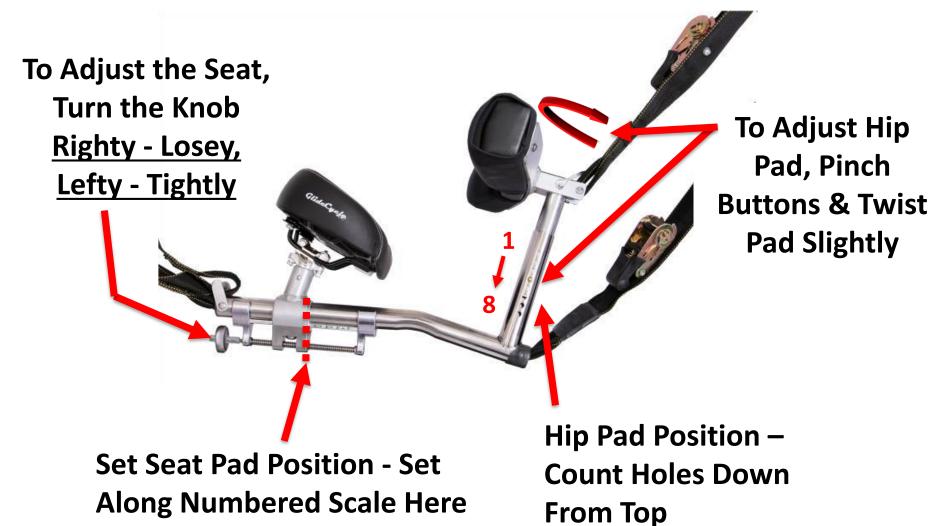




Set Safety Strap Hook 1-2 Holes Behind Back of Head

KEEP LOWER BACK STRAP SHORT (12"-15" max) and TIGHT BEFORE UNWEIGHTING

| Hip Pad and Seat Adjustments





Example Patient Set Up Card

WEIGHTLESS TRAINING

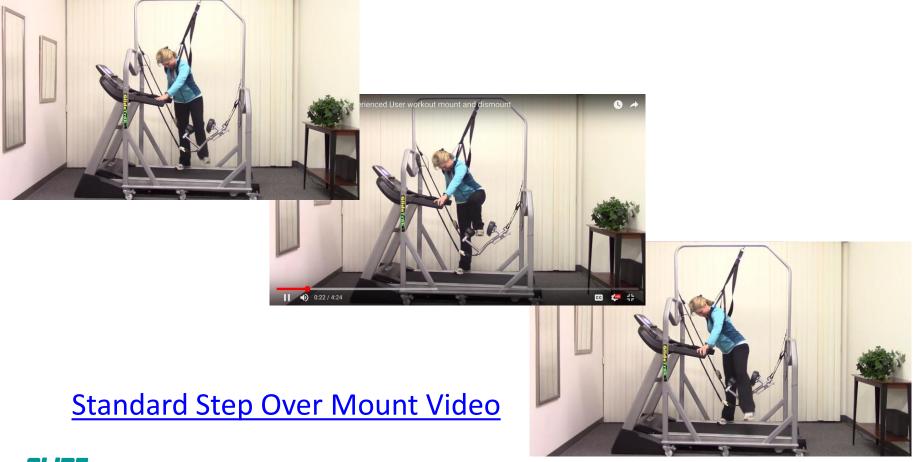
Patient Name:	Jane Doe
Top Front Strap:	3
Bottom Front Strap (-2):	5
Bottom Back Strap:	7
Top Back Strap (-3):	4
Hip Pad:	5
Seat:	4.5



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Patient Mounting & Dismounting Options

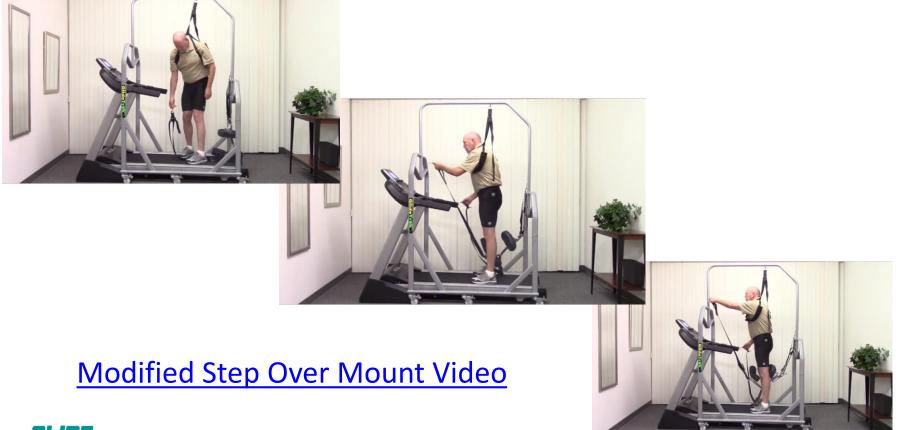
Standard Step Over Method





Patient Mounting & Dismounting Options

Modified Step Over Method





Patient Mounting & Dismounting Options

Assisted Through the legs Mount

Assisted Through the Legs Mount Video



Safety Strap Use



- Only patients that are able to reliably stand unaided should use the safety harness
 - Use the balance harness for patients unable to stand unaided
- Place the strap on patient immediately after stepping up onto the treadmill
- Only remove the strap as the patient is stepping off treadmill
- Place the strap hook 2 holes behind the back of the patients head
- Tighten the strap until it is almost snug
- The safety strap is for fall protection only never use the strap for unweighting



Balance Harness Use

The Balance harness is used for:

Harness Use Standing Patient

Harness Use Seated Patient



- Aiding in the lifting of patients from a seated position
- Extra support / fall protection for mounting or dismounting the GlideTrak
- Fall protection when using the GlideTrak without the Saddle Assembly
- Fall protection when using the GlideTrak over the ground



Saddle Settings

- Determining a patient's saddle setting is an iterative process
 - It may take 2 to 3 adjustments before getting it "right"
- Use a first time Hip Pad setting of 4 and Seat setting of 4 for patients between 5'6" – 6'0" and 140-200 lbs.
 - Make initial adjustments accordingly for patients outside this range
- Minimize making changes until the second session if possible
 - Initial assessments are often wrong
 - Let the client work with the setting before deciding on any changes
 - Minimizes having the patient get on and off repeatedly
 - Exception: moving the seat back is easily done with the screw gun while the patient is in place
- Record saddle settings and adjustment notes for next session



Proper Position for Unweighting





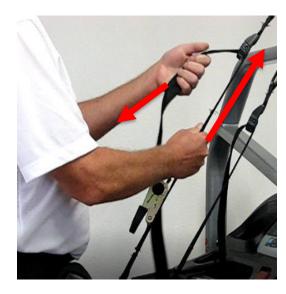
- Snug the saddle onto the patient
- Have patient STAND with legs straight and heels back
 - Patient should be weight bearing
- Ensure Bottom Back Strap is short & tight
- Unweight patient in this position
 - Ensures equal weight bearing between hip and seat pads
- Unweighting the patient as in picture 2 creates a SITTING position
 - This results in improper mechanics and excess pressure on the glutes

Unweighting Technique

- Confirm patient is in proper unweighting position
- Begin unweighting by tightening the Front Straps
 - Have the patient go up on their toes or leaning slightly forward and back while tightening straps
 - See unweighting method videos for more detail
- Use the ratchets to achieve the desired unweighting
 - <u>Ratchet Use Video Link</u>
- Use alternate unweighting methods if needed
 - <u>Alternate Unweighting Methods Video Link</u>
- Tips and Tricks !!!
 - For each step, adjust the top front strap first the then bottom strap
 - Keep the tension of the Top Strap equal or tighter than the Bottom Strap
 - "Over unweight" at first then use treadmill incline to add weight bearing



Handling the Straps for Unweighting



Use the "Belay Method" to tighten straps:

- Use strong arm to pull down on the loose end of strap
- Use weaker arm to pull up on the tight part of the strap
- <u>Use the same technique from the</u> <u>side when making adjustments for</u> <u>the patient</u>



Unweighting Settings

- Orthopedic patients Use higher % unweighting (~50% 90%)
 - Use enough unweighting for patient's movements to be pain free
 - Patients can change unweighting in real time by modifying their gait
- Neurologic patients Use lower % unweighting (~40% 70%)
 - Only use enough unweighting for patients to be fully fall protected
 - If neuro patients are dragging their feet on the treadmill while gait training, increase unweighting to raise them up
- You don't need a measure or scale to set unweighting
 - Your eyeball or patients estimates of unweighting are completely sufficient



|"Standing" vs "Sitting"

- "Sitting" while training is the most common patient mistake
 - <u>Sitting vs Standing Video Link</u>
- Patients must support all remaining weight after unweighting
 - "Sitters" engage the leg primarily below the knee
 - "Standers" engage the entire leg (thigh and calf)
- To reduce the tendency of patients to sit:
 - Make sure patients are standing properly when unweighting
 - Point out to them when they are sitting vs standing
 - Tilt the saddle assembly forward by tightening the top strap
 - See slides later in presentation
 - Incrementally reduce the unweighting until they have no choice to stand then reintroduce unweighting



Dismounting the GlideTrak

Press thumb & hold Pull back on strap





- Prepare patient for weight bearing
 - Have the patient straighten their legs and lock their knees
 - Verbally confirm they are ready for weight bearing
- Release the Bottom Front Strap first
 - Patient will drop slightly but are still supported
 - Release the Top Front Strap second
 - This is when they will be full weight bearing
- Two thumbs may be necessary to release the strap cam
 - Have the patient go up on their toes to ease release of cam
- The Bottom Back Strap can be used by an assistant for unweighting if desired
 - Remember to reshorten the strap for the next use



First Time Patient Use

- First time use objectives:
 - Orient the patient to GlideTrak
 - Give the patient the feeling of unweighting
 - Show them they can train safely; <u>No Falls</u> and <u>No Pain</u>
 - Assess the saddle settings for further customization
- Explain the theory and benefits of unweighting for gait training or rehabilitation
 - This enhances patient motivation and compliance
- Keep the first patient session (training time) short
 - One 10-15 minute session or two 10-12 minute sessions with a short break in between is ideal



GlideTrak Use Tips and Tricks

- Strongly encourage patients to wear appropriate clothes
 - Bicycle shorts and stretch yoga clothes work best
 - Loose fitting sweats work as well
 - Slacks, jeans and dresses are undesirable
- Check that patients clothes are not bunched up
- Have the patient use the restroom before their workout
 - The hip pad may cause a sense of urgency in some patients



Saddle Comfort

- Don't ask patients if they are comfortable
 - Asking puts their full attention on comfort
- Patients are least comfortable upon first couple of uses
 - Distract the patient during set up
 - Motivated patients will adjust to the saddle after a couple uses
- Comfort is worse at rest and at slow treadmill speeds
 - Only assess comfort with the patient moving at least 1.5 2.2 mph
 - Make sure patient is standing and weight bearing while moving
- Use your judgement to differentiate between misadjustment <u>pain</u> vs acclimatization <u>discomfort</u>
- Use the following adjustment guide to correct comfort for issues



Correcting Hip Pad Discomfort

Try the following to reduce Hip Pad discomfort:

- Ensure the patients clothes are not bunched or binding
- Make sure the patient is standing vs sitting
- Make sure the hip pad is on the hip bones
- Try less unweighting by increasing treadmill incline
- Tilt the saddle assembly back (see later slides)
- Try the saddle bridge <u>Saddle Bridge Video Link</u>



Correcting Seat Pad Discomfort

Try the following to reduce Seat Pad discomfort:

- Ensure the patients clothes are not bunched or binding
- Make sure the patient is standing vs sitting
- Make sure the seat pad is not below the gluteal fold
- Try less unweighting by increasing treadmill incline
- Tilt the saddle assembly forward (see later slides)
- Try the saddle bridge <u>Saddle Bridge Video Link</u>



Correcting Rubbing of Center Tube

Try the following to reduce rubbing of the center tube:

- Ensure the patient is centered on the seat
- Have the patient tighten their core to help stabilize the seat assembly (SA)
- With the patient moving, push down on hip pad on the side where the tube is rubbing
 - Ask the patient to help center themselves on the seat while doing this
 - Be patient this may take several times to work
- Make sure the hip pad is not too high
 - The SA can rotate when the hip pad is on the abdomen vs the hip bones
- Determine if the client is walking evenly
 - Gait or posture asymmetry can cause the SA to rotate
 - Use the push down method until the asymmetry can be corrected
- Try the saddle bridge <u>Saddle Bridge Video Link</u>



Saddle Tilt Adjustment - Forward







- Forward (vs nominal) tilt is used for:
 - Reduced tendency to sit on seat
 - Reduced pressure of the glutes on the seat
 - More athletic and aggressive workouts
 - Increased rear leg extension
- Tightening the top strap moves the hip post tilt forward
- For a highly forward tilted saddle, raise the Bottom Back Strap hook up one hole
- Forward tilt may increase pressure on the hip pad

Saddle Tilt Video Link



Saddle Tilt Adjustment - Backward



Backward Tilt



- Backward (vs nominal) tilt is used for:
 - Reduced pressure of the hip pad
 - Aiding "sitting" for patients unable to carry any weight while working out
- Tightening the bottom strap moves the hip post tilt back <u>and</u> increases unweighting
 - Use treadmill tilt to compensate for increased unweighting
- Lower the Bottom Back Strap Hook one hole is necessary
- May increase seat pressure, reduce back leg extension and increase tendency to sit

Saddle Tilt Video Link



Saddle Bridge Use





- Use the Saddle Bridge for:
 - Thin, slight of frame patients
 - Patients unable to get comfortable
- Men tolerate the saddle bridge well except at very high unweighting
- A seat position wider than normal is typically used with the saddle bridge
 - This transfers some weight bearing from the saddle assembly to the saddle bridge

Saddle Bridge Use Video Link

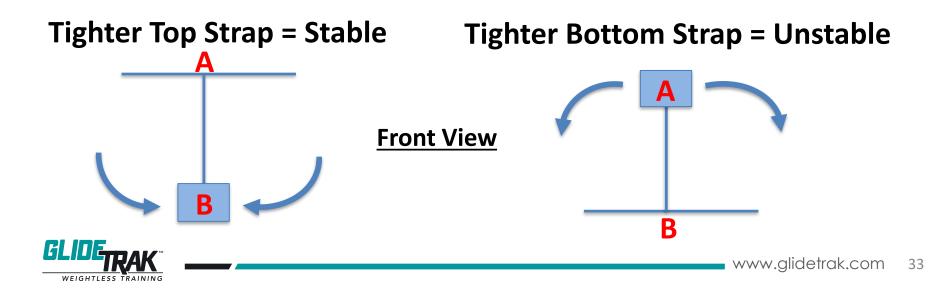


| Correcting Side to Side Instability

Side View

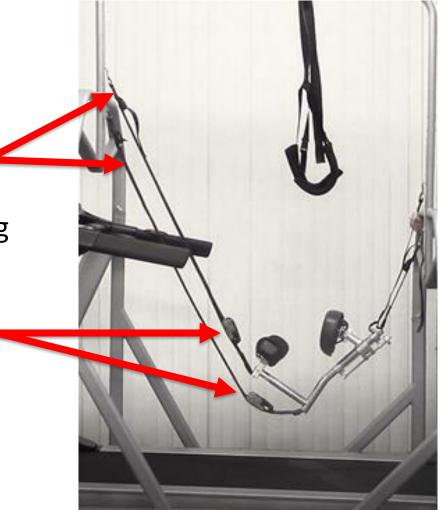


- The top strap should always have <u>equal or greater</u> tension than the lower strap to prevent lateral instability
- Tighter bottom strap tension induces lateral instability



Hanging the Saddle When Not is Use

- Keeping the <u>top strap slightly</u> <u>tighter than the lower strap</u> prevents the saddle from rolling
- <u>Always reset the ratchets</u> so they are ready for the next client - <u>Ratchet Use Video Link</u>





Raw Video Links #1

- Standard Step Over Mount
 - <u>https://youtu.be/zz-yL2-j2vs</u>
- Modified Step Over Mount
 - <u>https://youtu.be/TpRBwvj2Mqo</u>
- Through the Legs Mount
 - <u>https://youtu.be/IQ-h9_HOPPY</u>
- Harness Use Standing Patient
 - <u>https://youtu.be/jSNpz_BVYoc</u>
- Harness Use Seated Patient
 - <u>https://youtu.be/BS94eoLeCEM</u>



Raw Video Links #2

- Sitting vs Standing
 - <u>https://youtu.be/OE3VH-idJmE</u>
- Saddle Tilt
 - <u>https://youtu.be/emdsdDsvmMo</u>
- Using Treadmill Incline for Unweighting
 - <u>https://youtu.be/j0M_etYxKx8</u>
- Saddle Bridge Use
 - <u>https://youtu.be/az8NnpWpBdk</u>
- Ratchet Use
 - <u>https://youtu.be/O9squJ3KF3s</u>

