



Owner's Manual for Treadwall^{FT}® V4 and V6



Brewer Fitness, 87 York Ave., Randolph, MA 02368 USA

781-961-5200 / sales@brewerfitness.com

INTRODUCTION

Vertical movement is a new category of training that works the whole body and mind together.

The Treadwall^{FT} series delivers a full range of workout opportunities - from a remarkable aerobic burn to an upper-body core and grip-strength workout that challenges the fittest athletes.

When introducing a Treadwall it is important that the staff understands how to unlock the potential benefits of this powerful fitness tool.

The owner's manual is designed to help managers, staff and trainers take full advantage of this equipment. This reference tool emphasizes the benefits of vertical movement with links and resources to help integrate the wall into fitness

PRODUCT REGISTRATION

Record your serial number here: _____

Please register your Treadwall with us by emailing us at sales@brewerfitness.com with your contact information and serial number to complete your product registration.

You must make sure to register your new Treadwall to receive service updates.

Safety Tips

WARNING - Read all instructions before assembling and using the Treadwall.

In General - Handling and Assembly:

Be careful when moving and installing larger Treadwall components as they require effort to lift and attach. Some steps require two individuals. Have a second person assist you during assembly and make sure to have two ladders on hand.

Carefully read and understand the Treadwall Owner's Manual. Provide a general overview of the basic operations and usage to new Treadwall users. Do not place other equipment or any items in the fall zone or onto the floor mat of the Treadwall.

FT Multipurpose Specifications

	Max Frames	S Frames	V Frames
Weight			
Width climbing surface	4 feet/6 feet	4 feet/6 feet	4 feet/6 feet
Length climbing surface	18-20-22 feet	18-20-22 feet	18-20 feet
# hold Placements	144...264	144...264	144...240
Angle Range	+10 to -35 deg	+10 to -15 deg	Vertical only
Electrical Requirement	9 V Plug-in Transformer	9 V Plug-in Transformer	9 V Plug-in Transformer
Maximum Hold Size	2.5" high x 6" wide	2.5" high x 6" wide	2.5" high x 6" wide
Included Holds (Pro)	36/45 custom holds	36/45 custom holds	36/45 custom holds
Electronic Display (Pro)	Distance, time, calories	Distance, time, calories	Distance, time, calories
Floor Mat (Pro)	1.25" dual foam , black vinyl	1.25" dual foam , black vinyl	1.25" dual foam , black vinyl
Warranty	6 years parts, one year electronics and labor	6 years parts, one year electronics and labor	6 years parts, one year electronics and labor

HOW THE TREADWALL® WORKS

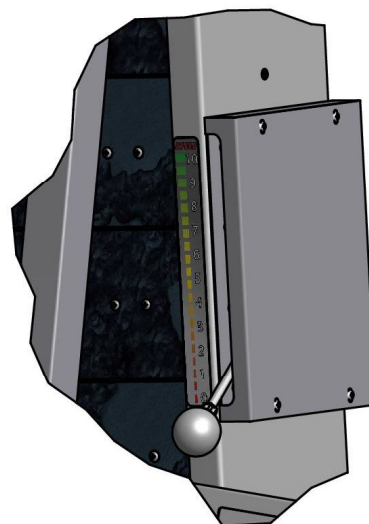
It's very simple, you can just hop on and climb! The weight of your body will move the wall downwards. With our auto-stop technology, if you stop climbing, the Treadwall will stop and wait for you when your feet reach the bottom. The Treadwall will not move unless you are on the wall and climbing upwards.

Use the digital counter to set goals, manage your progress, and track your exercises. The counter will begin automatically counting upwards when you start climbing, or you can set time and distance goals on the setup screen.

Speed Control

To control the speed of your climb you simply move the lever up and down. At the "0" setting the Treadwall will be completely stopped for most people or it may just barely creep downwards for heavier individuals. At speed "10" the wall is at its fastest and only requires about 50 pounds of weight to move. The ideal setting will be different for people of different weights.

Accurate current and average speeds are displayed on the counter in feet/min. or meters/min as required.



Angle

The Model V offers climbing at a space efficient vertical angle.

Climbing at the vertical angle is a great balanced workout. Legs, arms, hands, feet, trunk and shoulders are all brought into play for full-body natural exercise. You can use vertical climbing as an excellent stand-alone activity or part of a comprehensive fitness program.

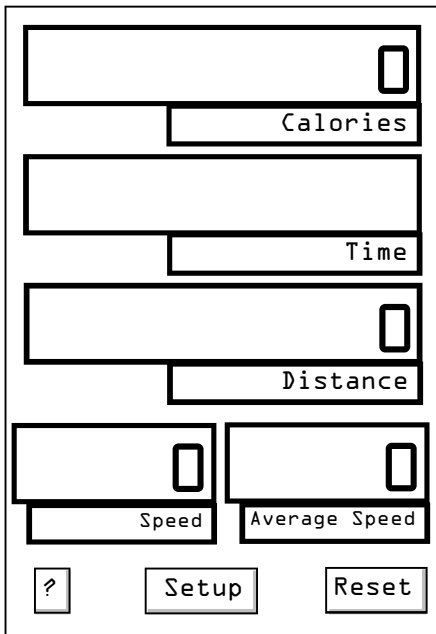


Operating Instructions

Digital Counter

The counter will start as soon as you begin climbing. It will pause if you rest for 5 seconds, and it will power down after 5 minutes of non-use. To turn the counter back on just start climbing, or tap the screen.

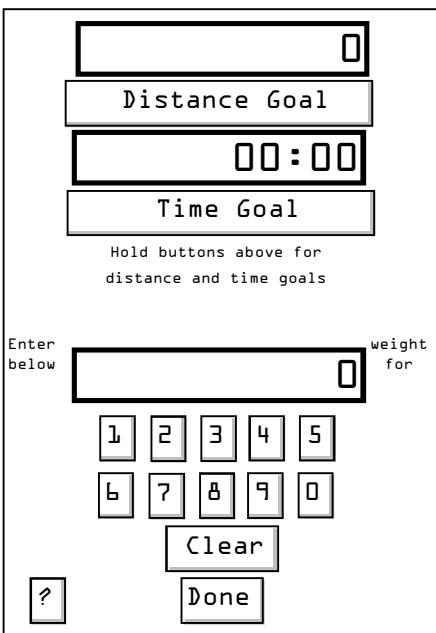
You can adjust the view angle by adjusting the small arm at the rear of the counter.



The Home Screen UI mockup shows a vertical stack of five data fields, each with a numerical display and a label below it: 'Calories', 'Time', 'Distance', 'Speed', and 'Average Speed'. At the bottom of the screen are three buttons: a question mark icon, 'Setup', and 'Reset'.

Home Screen

The home screen shows real-time data for a single climb. When you pause for 5 seconds the counter will hold your data on the screen until you begin climbing again and then it will start from where you left off. To reset the counter for a new climber hit "Reset."



The Setup Screen UI mockup features two goal-setting sections. The first section has a 'Distance Goal' label above a numeric input field. The second section has a 'Time Goal' label above a time input field (displaying '00:00'). Below these is the instruction 'Hold buttons above for distance and time goals'. A weight input section is labeled 'Enter below' on the left and 'weight for' on the right, with a numeric input field. Below the weight field is a numeric keypad with buttons 1-9, 0, and a 'Clear' button. At the bottom left is a question mark icon, and at the bottom center is a 'Done' button.

Setup Screen

To set a distance or time goal tap or hold the buttons labeled "Distance Goal" or "Time Goal". The values will increase more rapidly as you hold the buttons down longer.

The number pad allows you to enter your weight for a more accurate calorie count. The default weight is 150 pounds. When you are satisfied with your goal, hit done and the value you selected will appear on the home screen.

You can only select a distance or a time goal, not both at once.

Making Your Treadwall a Success

Groundwork:

Staff should understand that vertical movement is a basic human activity and part of everyday life. It should be presented as a positive and accessible addition to the facility.

Climbing will often be perceived as challenging and intimidating. A staff locked into the value of vertical movement as a fitness tool is the key for changing this perception. Members should be actively encouraged to try the Treadwall and consider it for part of their workout routine. We have found that people who are initially hesitant often end up being the biggest Treadwall fans.

Choosing an Advocate/Integration

When the Treadwall is first installed, it will be an unfamiliar item. Climbing will be a relatively new training activity for most. We recommend that a staff person be chosen as the main advocate for the product's introduction period. This person might take on the following responsibilities:

1. Read through the manual thoroughly to become familiarized with the Treadwall operation procedures, use and set-up.
2. Formulate a plan to integrate this equipment into their classes, personal training or general usage.
3. Create fun ways to get you members hooked on Vertical Movement - challenges, competitions and incentives (such as our popular Everest Club program).

Set up a meeting with trainers to Establish Goals and Discuss Ideas:

1. Cross-training for sports that emphasize forearm strength such as martial arts, baseball, swimming and tennis.
2. Weight-loss programs. Focus on manageable goals, using easier positive angles. Emphasize smoothness over speed.
3. For Cardiovascular try 15 minutes once a week or every two weeks in place of a treadmill.

Information for Your Staff

The Benefits of Vertical Movement: *Valuable Information*

Most fitness activities target isolated muscle groups, but vertical movement is different. Using a Treadwall provides a full-body, non-repetitive exercise that can be adapted by the user for different goals. You can customize the experience by adjusting the exercise patterns, angle of the wall and climbing speed.

In terms of focus and mental involvement, climbing has no peer. The activity requires constant decision-making and concentration. This promotes a quick motor response and muscle recruitment. Technique, balance and core strength interplay and climbers often develop a heightened sense of body awareness and confidence in their daily lives.

The Treadwall is very versatile. It can stand alone as a high-energy interval trainer, with longer workouts to develop endurance, or as part of a circuit routine with other equipment.

Customize it to suit YOUR needs and GOALS:

- 1) You should use the equipment yourself. Get a first-hand look at how the workout makes you feel, learning to access angle and speed to accommodate a range of abilities. Experience the benefits of vertical movement personally.
- 2) At first, clients might consider this equipment to be intimidating, but knowledge you can pass on to your members about training and benefits will help bridge the gap.
- 3) Check out all the different ways it can be used, experimenting with different hand grips, angles, speeds and body movement. Your personal experience and enthusiasm will engage the user. Be creative.

Encourage members and clients to try it out:

Introduce it at the easier positive angle first so that members can get familiar with the balance and motions involved. The workout on the Quick Start guide at www.brewersledge.com/ownersmanual is a good place to begin.

Emphasize controlled, smooth climbing and attention to balance and footwork.

Suggest short workouts to start, which will complement their current workout routine.

Training Tips/Guidelines

Below you will find different training tips we have learned over the years that can ease your clients into Vertical Movement.

Initial Exposure When your clients and members are trying out the Treadwall for the first time:

1. Ensure speed is on zero before having them climb.
2. Ask if they would like you to control speed at first.
3. Encourage them to try adjusting the speed themselves: Set the speed to 0 and tell them to climb about half way up. Let them know that at settings 7 to 10 the speed is quite fast, so move the speed lever slowly. All they have to do is hang on, reach for the speed lever, and pull it up a small amount.
4. Have them take it slow at first and focus on smooth movement.
5. Emphasize the need to move your feet above a certain panel to keep the wall moving. Auto-stop will automatically stop the rotation as they approach the bottom.
6. Tell them they can keep going even after the auto-stop has engaged, just continue climbing and the wall will resume rotation.

Initial Workout:

Most people are unfamiliar with climbing holds, but the Treadwall Base set is very user-friendly. If ordered, the Ladder Line is an excellent way to introduce them to the basic balance and movements. Try having them start on the Ladder Line first for a couple of minutes to get a feeling for it.

As they continue to climb, then suggest using a few of the climbing holds as well as the Ladder rungs.

If the client is looking for a more complete challenging program, or you need ideas, refer to our website where you will find complete training programs and sample workouts.

Activities & Promotional Ideas

Setup a Mt. Everest club challenge for staff and members:

Perhaps use teams. (Brewer Fitness provides free Everest Club membership to the first three staff members to complete the challenge.

Recognize the first members to start on Mt. Everest Club challenge:

The Everest Club:

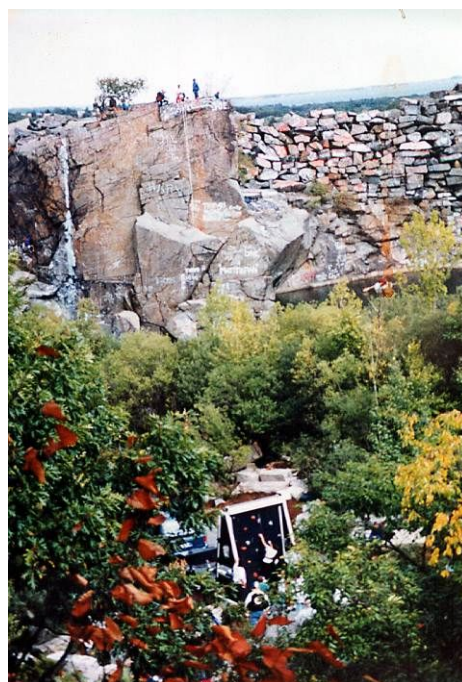
Climb 29,028 feet on the Treadwall and you are eligible to join. You can find the Everest application and a training log at www.brewerfitness.com/OwnersManual

Special incentive:

Brewer Fitness provides free Everest Club Membership to the first three staff members to complete the Everest Challenge

Use the bulletin board to put up names and perhaps pictures.

Completing the Everest Challenge is a major accomplishment. Climbing 1000 feet a day, seven days a week, it will take a full month. For most people it will take the better part of a year. Anybody who completes this challenge will come out a different person—fitter, stronger, healthier, and most likely more confident. An important advantage to having a Treadwall is being able to offer this unique program.



Frequently Asked Questions

How hard is climbing on the Treadwall?

Climbing on the Treadwall is as hard or as easy as you choose. The wall is customizable in difficulty by altering the speed, angle and route you follow.

How fast can I climb on the Treadwall?

The Treadwall is easily adjusted via the speed lever. In addition, the auto-stop system will keep pace with your stops and starts. We recommend starting off climbing at a slower controlled pace, focusing on smooth movement.

How does the Treadwall work?

The Treadwall operates by the weight of the climber. There are no electric motors. A hydraulic brake controls the speed of descent. The Treadwall cannot move after the climber steps off.

How long should I climb for?

This depends on your objectives. Test out various methods and take a look at our training section at www.brewerfitness.com

Will the hold pattern get repetitious?

Eventually, but it takes much longer that you might expect. The Treadwall has no beginning or end, and it continually presents you with new challenges and possibilities. It is simple to set holds in other places and change the climb completely.

Do I need special shoes to climb the Treadwall?

No. Any well fitted athletic shoe will do quite well. However, special climbing shoes are more enjoyable to climb in. Climbing shoes are very close fitting with a special flat sole of special 'sticky' rubber. They are quite expensive. Karate shoes are a good inexpensive alternative.

Can anybody use the Treadwall?

Almost anyone can perform vertical movement. Anyone with a serious physical problem should consult with their doctor, and people with very long fingernails should think twice. We also suggest taking off your rings before climbing.

Frequently Asked Questions

Can you be too old to climb?

Maybe, but we have reports of people well into their 70s who enjoy climbing on the Treadwall. One climber 72 years old recently completed the Everest challenge (29,028 ft.) - for the 10th time!

Does everyone like it?

Most people who try the Treadwall love it. Some of the biggest fans are people who start off saying "I don't think I'd like that." Everyone should be encouraged to give it a try.

I have never done that. Will it take me long to learn?

Never climbed? - not likely. Most children spend many happy hours climbing play equipment and trees. For adults, climbing on the Treadwall recaptures much of that simple joy and natural vertical movement.

What kind of bodies does Vertical Movement build?

Climbing and gymnastics are similar, promoting muscle tone, flexibility and endurance with increased agility and body awareness. Your body will respond by burning fat, creating a lean muscle structure and increasing bone density

Do serious climbers like the Treadwall? Yes, it is a perfect endurance training tool, all the way from elite climbers to a novice.

General Maintenance

INTRODUCTION

Treadwall® maintenance is easy and requires only lubrication and cleaning. The most important maintenance of the Treadwall occurs during the first month of operation when the chain and cables are stretching to their final length. It is very important to keep the angle-adjuster cables tight during this break-in period so that the coils remain even and do not overlap. Also the drive chain must be tightened after 2-3 weeks of use. Instructions for these adjustments are included here.

THEORY OF OPERATION

Treadwall^{FT} series is completely powered by the climber. The wall does not rotate by itself, but only when a person begins to climb on the machine. You can vary the speed of climbing with the lever located on the right side of the machine. This lever controls a hydraulic resistance unit located at the top of the right channel. The hydraulic resistance mechanism is connected to the main shaft with a short chain.

Our auto-stop system is triggered when the weight of the climber's foot reaches the bottom panel. The Treadwall will not move when someone is standing and not climbing upwards. The internal sensor for this system is located at the bottom right side of the machine.

The panels slide through the side channels on small plastic buttons which help reduce friction in the system.. These buttons are located on the corners of each panel. The panels also contain welded fasteners which allow the climbing holds and various attachments to be added in any configuration the user wishes.

The entire center section of the wall pivots to allow for the angle of the wall to change (Max and S models only). This is controlled by a patented system of synchronized cables. A lever on the left side of the unit (Max and S frames only) releases the brake that hold the angle—this can be changed either before using or while climbing.

There is an electronic counter on the right side of the machine (Pro models) that allows users to track distance, time, and calories. The sensor for this system is located on the inside the right channel. The sensor detects a series of magnets placed on the main shaft.

General Maintenance

Maintenance Schedule

After The First Month:

- Check the drive chain to make sure that it is not loose. Tighten if necessary.
- Check and tighten holds if necessary. They may loosen more readily as the panels adjust to your gym.

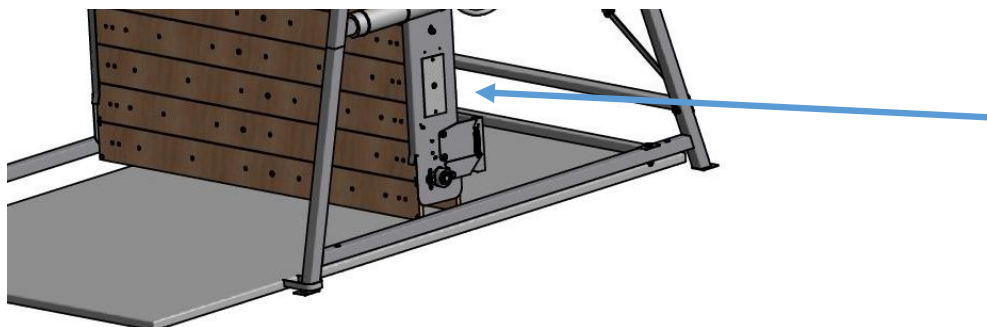
Every 6 Months:

- Lubricate the side channels —*This can be done more or less frequently depending on usage.*
- Clean the Climbing holds and set new routes.
- Wipe down and clean machine.

How to access the inside of your Treadwall

The Treadwall wall panels are bolted to a set of chains. These two chains form a continuous loop around the top and bottom axles. Each panel is attached to flanges mounted on the chains with 4 Philips head bolts and 3/8" lock nuts.

Rotate the wall so that the desired panel is lined up with the access hole. Remove the cover, then remove panel bolts and nuts. Rotate the wall downward and allow the panel to drop out at bottom. Multiple panels can be removed in a similar manner if necessary. Rotate the wall until the opening is at the height where service is required. Reverse this process to reattach the panel and cover up the access hole.



Service Instructions

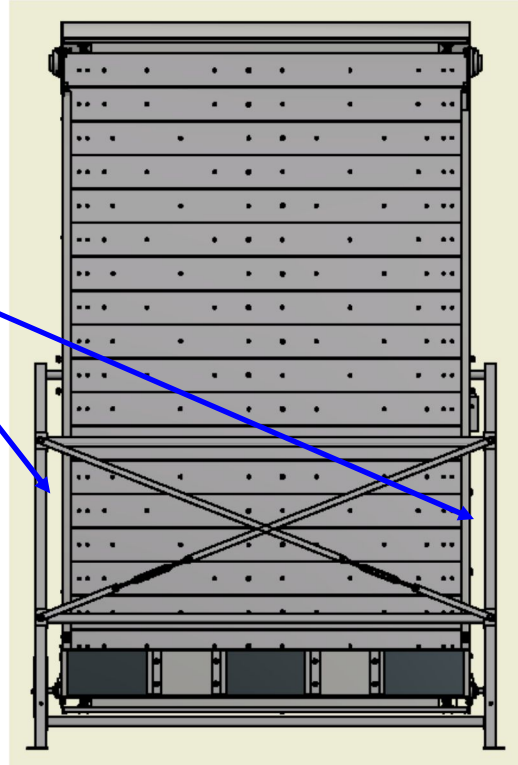
Frame Alignment: generic

Adjust so that there is an equal spacing on each side of the wall. This will make the angle adjustment easier. The slight angle of misalignment will not affect the operation of the Treadwall.

By loosening one turnbuckle and tightening the other, you change the frame alignment and the position of the wall inside the frame.

To swing the wall towards one side, you will tighten the turnbuckle on that side and loosen the other.

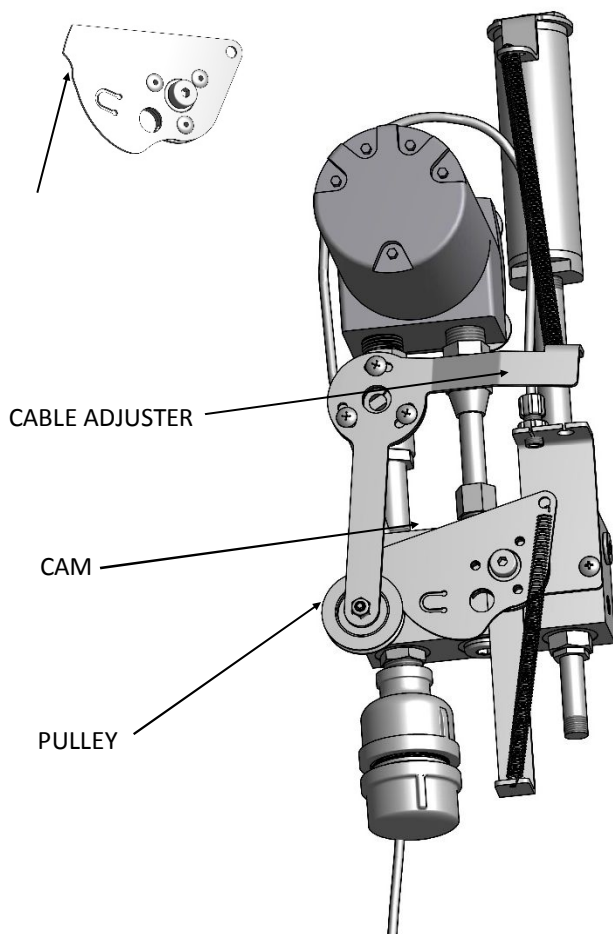
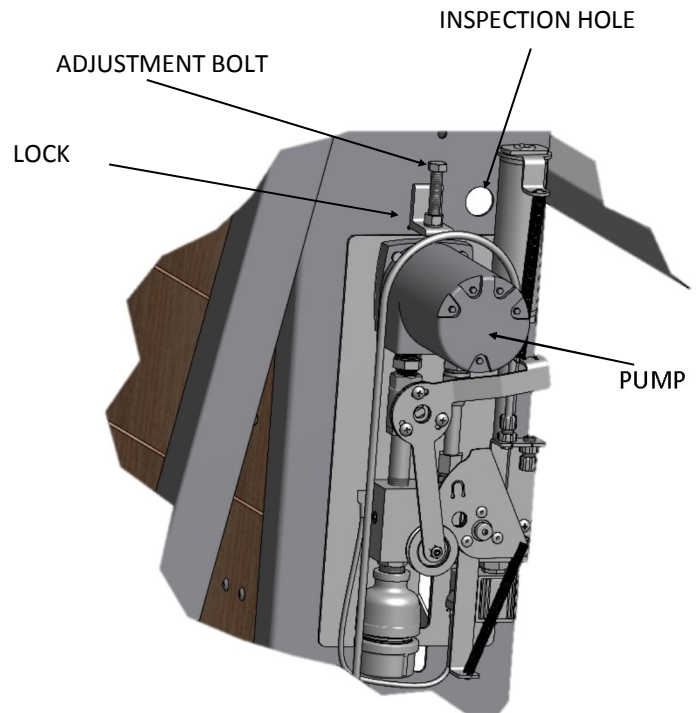
Make to sure to retighten both turnbuckles.



Service Instructions

Drive Chain Adjustment

1. The drive chain can be adjusted from the outside of your Treadwall, you only need to remove the hydraulic box cover on the top right of the machine.
2. Loosen the locknut on the adjustment screw, and tighten the screw down onto the pump. Only make it finger-tight. If the chain is too tight, the Treadwall will operate sluggishly.
3. Tighten the locknut and check the chain – feel it with your finger at the inspection hole. There should be no slack, but not too tight.



Speed Lever Adjustment

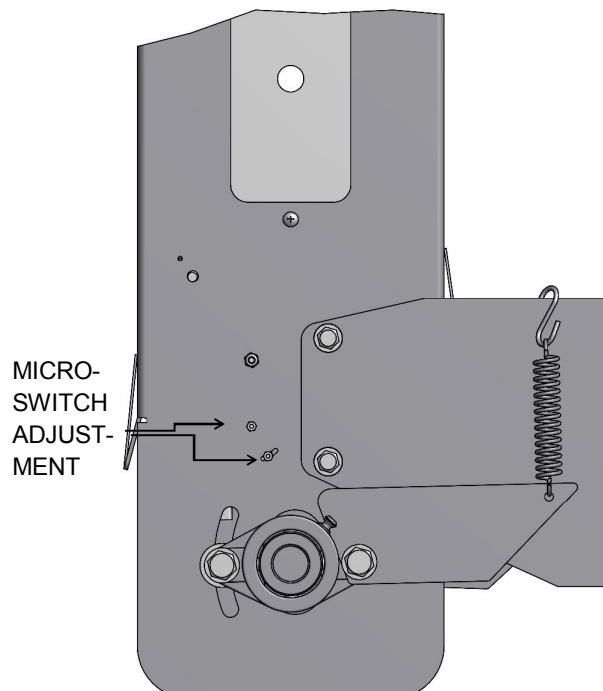
1. Adjust the speed lever to the slowest position.
2. The hydraulic unit is at the top of the right channel. Remove the cover (two screws).
3. Note the cam and pulley that together control the valve. With the lever at slowest position, the pulley should be at the highest point of the cam. There is a notch at the highest point that the pulley fits into.
4. If the pulley is not at the highest position, tighten the cable with the adjuster.
5. Operate the lever a few times to check the adjustment. If the wall still creeps excessively, see the instructions for adjusting the cam follower.

Service Instructions

Auto-Stop Adjustment

1. Loosen the two small nuts on the outside of the channel that hold the microswitch in place.
2. Adjust the microswitch by pivoting it around its upper mounting screw (see diagram).
3. Retighten the small nuts (not too much force – they are very small!)
4. Test the wall and re-adjust if necessary.

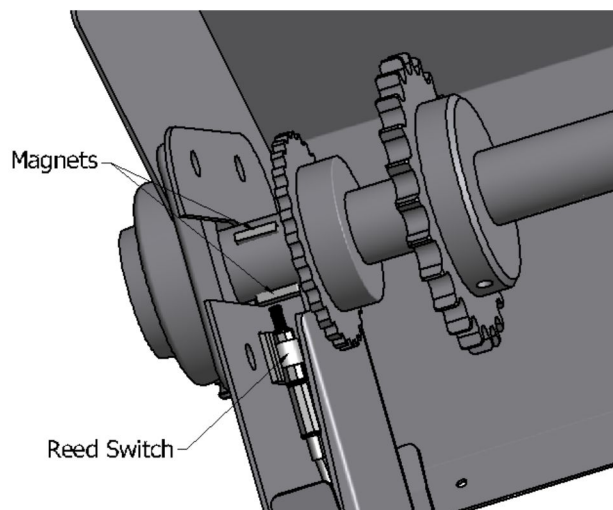
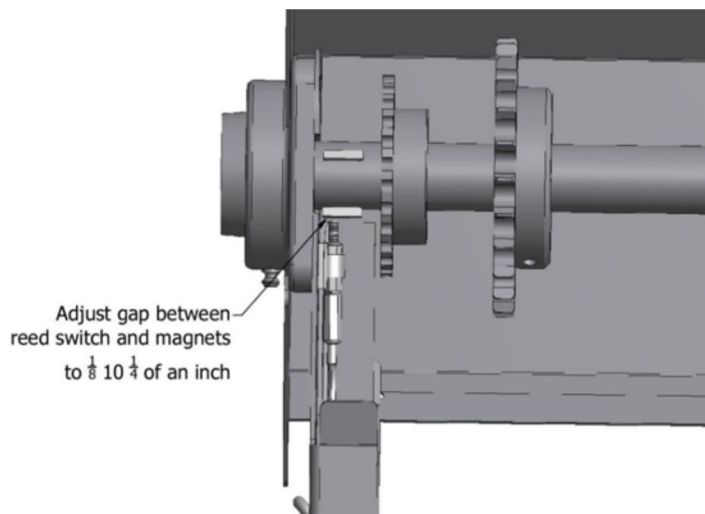
If the microswitch needs to be inspected further or replaced remove the plastic access hole cover and all nuts and washers from the microswitch. Reach inside of the access cover and unclip the electrical wire from inside the channel and pull the microswitch out.



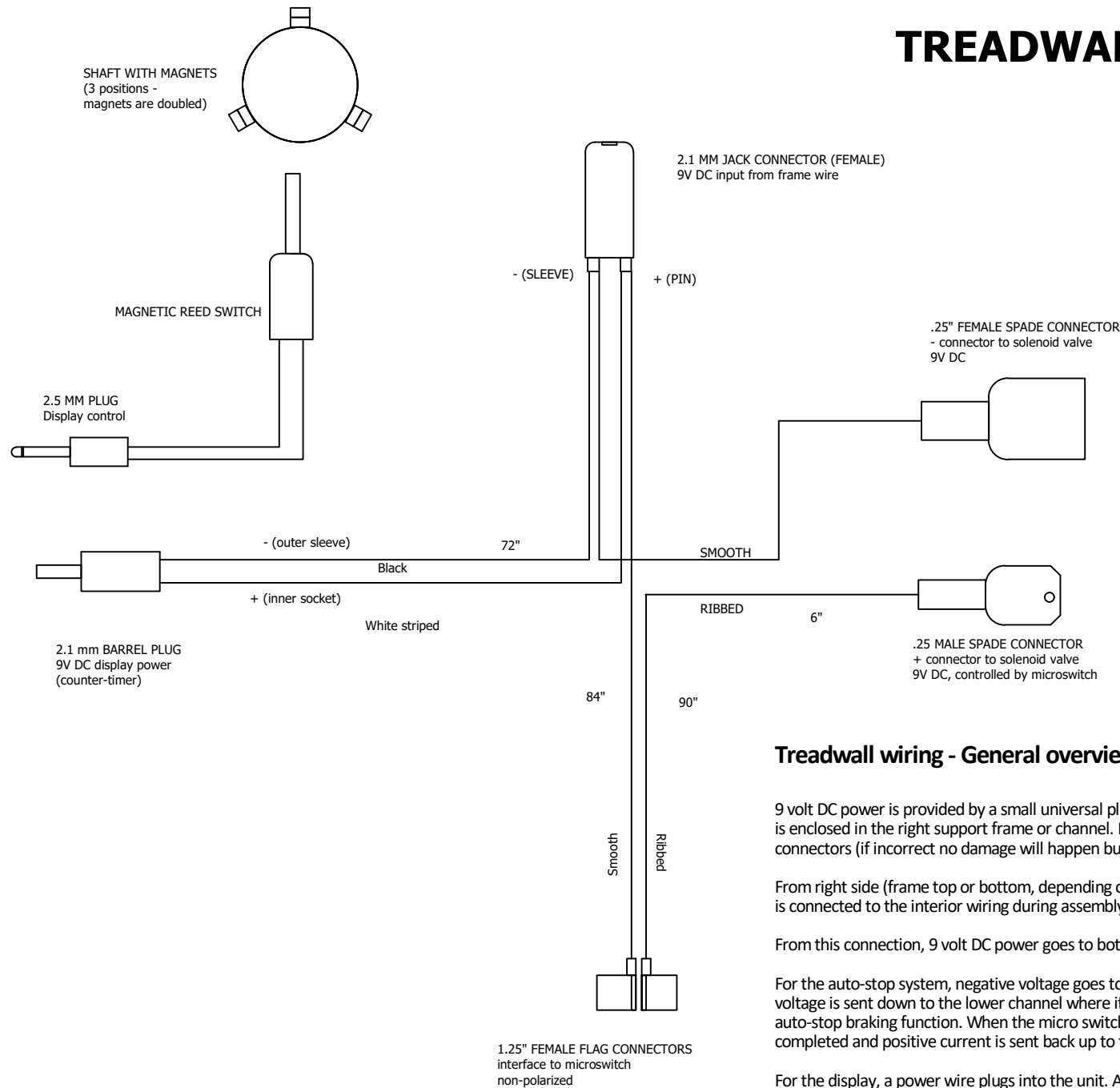
BOTTOM OF RIGHT CHANNEL

Counter Sensor Adjustment

1. Remove 1 or 2 panels
2. Rotate panel gap to reveal sprocket and sensor assembly on right side of machine.
3. Inspect sprocket and make sure that three/six(3 magnets doubled up) magnets are present, they should be equally spaced around the shaft with the flat face of the magnet facing outwards.
4. Inspect reed switch position, the tip should be 1/8 to 1/4 inch from the magnets.



TREADWALL WIRING



Treadwall wiring - General overview

9 volt DC power is provided by a small universal plug-in transformer that is connected to a power wire that is enclosed in the right support frame or channel. Polarity is important and has been pre-set by the connectors (if incorrect no damage will happen but the display and auto-stop will not work.)

From right side (frame top or bottom, depending on unit) the power wire enters the right channel where it is connected to the interior wiring during assembly.

From this connection, 9 volt DC power goes to both the auto-stop system and the display.

For the auto-stop system, negative voltage goes to the solenoid valve in the hydraulic unit and positive voltage is sent down to the lower channel where it passes through a micro switch that controls the auto-stop braking function. When the micro switch is activated by the climber's weight, the circuit is completed and positive current is sent back up to the solenoid valve that hydraulically brakes the wall.

For the display, a power wire plugs into the unit. A second plug receives the wire from a small reed switch, which is mounted on the upper channel next to the top shaft and activates the distance and time readout. Three paired magnets on the shaft pass close to the reed switch and trigger it as the shaft rotates sending a signal to the display.

Service Instructions

Lubricating the Treadwall®

The Treadwall panels slide down channels that should be lubricated bi annually, or more often if operation becomes sluggish.

1. Lubricant for exterior use (Garage Door lubricant) in a spray can is commonly available at auto supply and hardware stores. Also white lithium grease can be used indoors.
2. There are four channels to be lubricated. Two in the front and two in the back. Each channel has a rear surface and a front surface.
3. To lubricate the rear surfaces first put newspapers or a rag under the channels to catch drips.
4. Put the nozzle into the gap between two panels (fig 1) and squirt a little bit of grease onto the rear channel surface. Do this for all the gaps in the front and rear of the Treadwall (about 70 gaps total).
5. To lubricate the front surfaces (fig 2), put the nozzle in between the panel and the front of the channel and squirt a little grease at the top and bottom corners of the panel. Do this for each panel – front and rear.
6. Don't over-do the lubrication. Just little squirt is plenty.

Fig 1

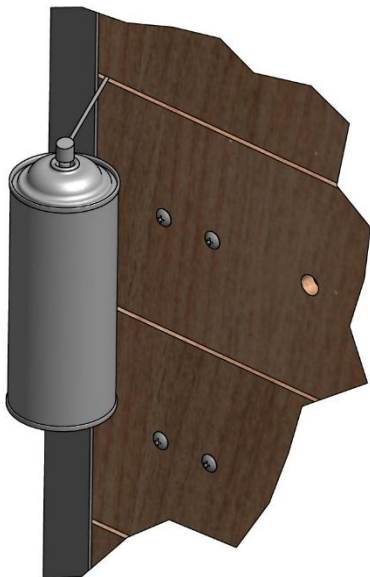
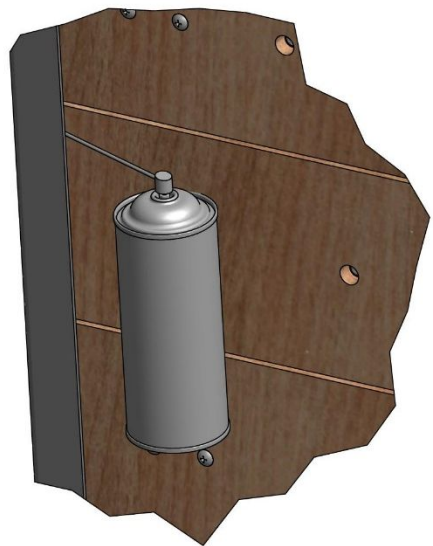


Fig 2



Safety Tips

Assembly Instructions: Model V

WARNING - Read all instructions before assembling and using the Treadwall.

For Assembly:

Be careful when moving and installing larger Treadwall V components as they might require effort to lift and attach. Some steps require two individuals. Have a second person assist you during assembly and make sure to have two 8-ft ladders on hand. Several of the heaviest components need to be lifted to the top of the machine.

Location Requirement:

Model V units MUST be located against a wall. This is a critical safety issue. Although the load is all on the floor (not the wall), they can be tipped over backwards. They are specifically designed to go against a wall.

References to “right” or “left” refers to the unit from the front or climbing side.

Angle: The position of the center section of the Treadwall in relation to a vertical wall

Channels: Long metal pieces on either side of the Treadwall, where the panels slide

Digital Counter: An electronic display which tracks the climbers progress

Holds: The plastic or wood attachment that a climber uses to hold or stand on

Ladder Line: A wooden climbing hold that allows for easy and aerobic climbing

Mat: A foam pad which protects falls, placed under the Treadwall

Panel: A wood board that forms the surface of the Treadwall

Shroud: A cover at the top of the Treadwall

Speed: The rate at which a climber moves the wall down

Stiffener: A metal reinforcement behind the Treadwall panels

Model V Treadwall Install Check list

- ◇ Assemble frames: Attach bottom horizontal
- ◇ Attach two upper horizontals and x-bracing
- ◇ Adjust and level frame
- ◇ Left channel
- ◇ Right channel
- ◇ Bottom shaft
- ◇ Top Shaft
- ◇ Frame –power wire
- ◇ Sensor
- ◇ Remove covers off channels ((1) hydraulic box and (2) bottom access covers)
- ◇ Drive chain
- ◇ Top Shroud
- ◇ Spacer bar
- ◇ Mount rear guard
- ◇ Install top half main chains
- ◇ Attach bottom half main chain
- ◇ Main chain springs
- ◇ Panel Stiffeners
- ◇ Attach first 1 or 2 panels and rotate around
- ◇ Attach remaining panels except last one
- ◇ Display and Testing
- ◇ Mount holds
- ◇ Test climb 100 feet/30 meters
- ◇ Mount side covers
- ◇ Final check
 - ◇ Check drive chain tension again
 - ◇ Auto stop
 - ◇ Sensor and display counting
- ◇ Mount last panel, hydraulic box cover & access covers
- ◇ Place mats
- ◇ Set remaining holds and test climb looking for loose holds
- ◇ Perform any customer training needed
- ◇ Warranty

Before Assembly:

The most important first step is to consider carefully the general location of your Treadwall. A location that is too visible such as directly in front of members using Cardio equipment or walking in the entrance may discourage people from climbing. Look for a location that is visible but relatively discreet for the user.

The floor should be relatively level. The wall against which the V is located should be clear of obstructions and the area directly in front of the Treadwall should be clear of any hazards for the climber or trainer.

Tools and help required:

You will need a helper (s) and possibly an 8-ft ladder. We provide a small tool kit with all new units that have tools that are not typically found in a tool kit. All the other tools are common.

Assembly will take 6-10 hours, please read the entire assembly procedure prior to installing. If you have questions contact us at 1-781-961-5200, 9- 5 EST.

Note: There may be some discrepancies in this manual as we are always improving details. Contact us if you have any questions.

Tools Needed:

1 - 1/2" wrench
 1 - 9/16" wrench
 1 – 3/4" wrench
 1 – small 3/8" sockets for panels (tool kit has one)
 1 – 9/16 & 3/4 sockets and socket wrench
 1 – Allen wrench set SAE
 1— Allen wrench set Metric
 1 – Medium Crescent wrench
 1 – Screwdrivers
 1—Small Level

1 – wiring pliers (good for working with master links on chains)
 1 – Cordless drill with #2 Phillips driver bits
 1—hand cleaner and rags

Helpful:

5/16" and 7/32" allen wrenches for a cordless drill (holds and stiffener bolts).

Tool Kit Provided:

1 – 3/8" panel wrench, custom
 1 - 5mm allen key with ball end (brake adjustment)
 1 - 3/16 Allen wrench for shaft collars on lower shaft
 1 - 5/16" Allen wrench for holds

Note: Set screw sizes for reference only:

1.5" bearings: 4mm allen key
 1" bearings: 3mm allen key
 Sprockets: 3mm allen key

NOTE: Although this guide is for the V models (vertical only) many of the images use similar parts where necessary. The Treadwall^{FT} V units are a simpler and very intuitive unit to assemble

NOTE: All model V units MUST BE LOCATED AGAINST A WALL.

Do NOT located a V unit away from a wall—this is a dangerous safety issue and it is highly important.

Note: the images show a V unit being assembled in open space: this is for illustration only. All V units must be located against a wall

Lay out all the parts and inspect them: report any damage or missing parts. Note there is a time frame (15 days after receipt of the unit) to report any damage or missing parts.

Open Hardware box and lay out the bags and hardware



M4 Pro-t frame shown



(Image above is an M4 Pro-t)

Set up main frames against a wall: there is a left and right side frame — see image to left. Have one person hold frames while assembling horizontals. Leave the bolts loose for now.

Note: the bottom horizontal uses 3/8" bolts mounted horizontally into the frame: the other two horizontals use 1/2" bolts. See images next page.

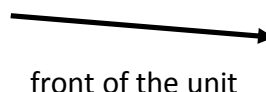
Bag FT-11 for all frame bolts

Custom Instructions for V model Horizontals

The V models have three horizontals: two are special to the V units. The Top horizontal has a ledger board mounted to it that is adjusted against the wall after the frame is assembled. The bottom horizontal is attached with different bolts.



Bottom Horizontal showing orientation of the hole and bolt towards the front of the unit



Bottom Horizontal

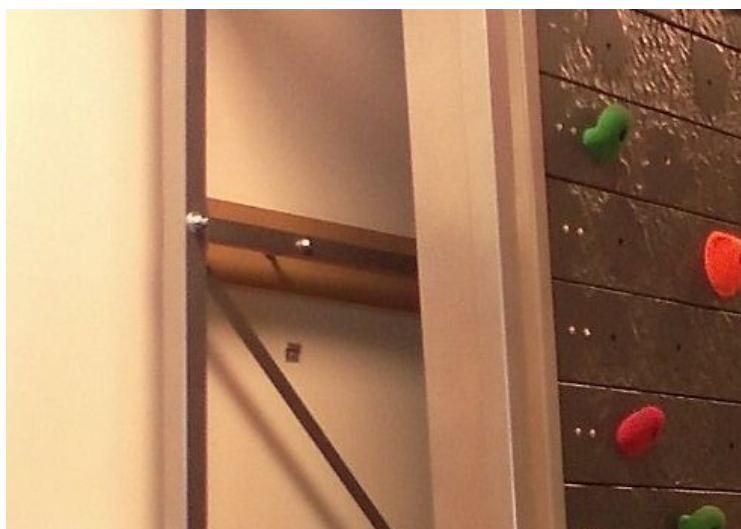
Install the bottom horizontal as shown. (The image is from a Max caster unit). **Note:** All V and Kore horizontals have end caps that are off-set to one side. The bottom horizontal as noted above is mounted with the offset end towards the climber (front) and bar towards the back.

For the two other horizontals (next page), the off set end can face either direction.

Top Horizontal

Install the top horizontal with the ledger board to the back. You will position the unit against the wall and by adjusting the position of the Ledger board, secure the Treadwall V against the wall and prevent any rocking. The Ledger board may be fastened to the wall after if desired.

(older M6-V shown for illustration)



Install the top two horizontals. There is X-Bracing that goes on the outside of the horizontals that will be attached using the same bolts. Attach the two longer braces to the top horizontal and the shorter braces at the bottom. Attach the X-bracing together using the turnbuckles and tighten as needed to level the frame. (M4 Pro-t frames shown for illustration only)

Install the bottom horizontal using the 3/8" bolts and tighten the 3/8" bolts first.

Next firmly tighten the X bracing turnbuckles: use these to level the wall using a level on the back horizontal. By adjusting the turnbuckles, you can align the frame side to side.

Finally, once level, tighten the 1/2" bolts on the top two horizontals.



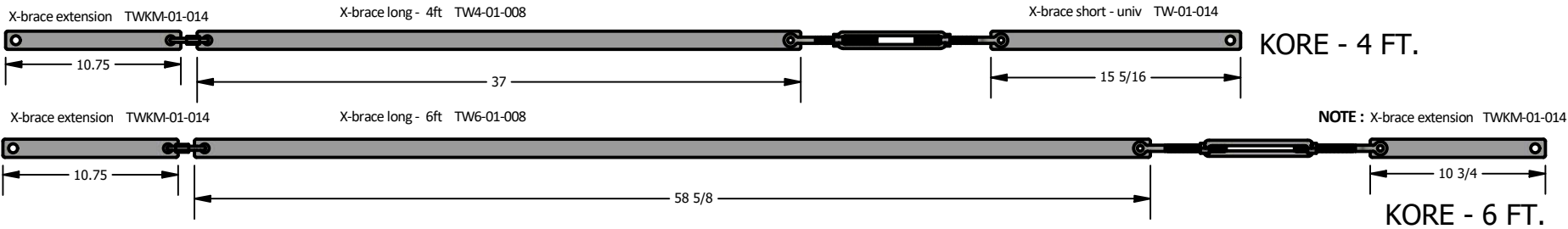
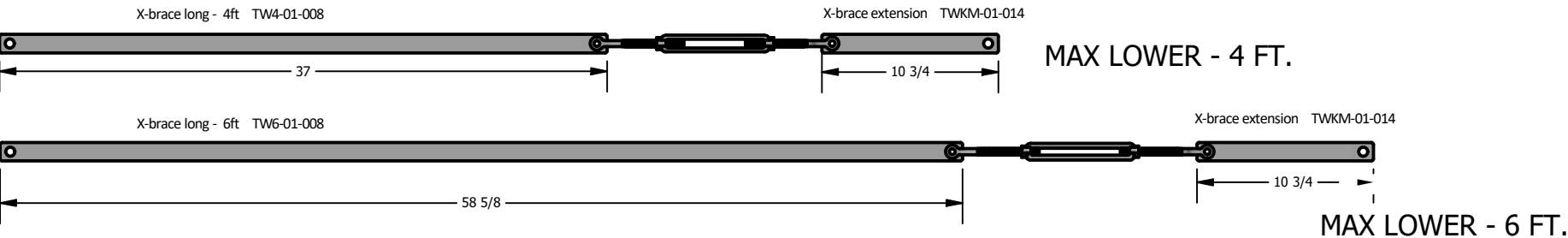
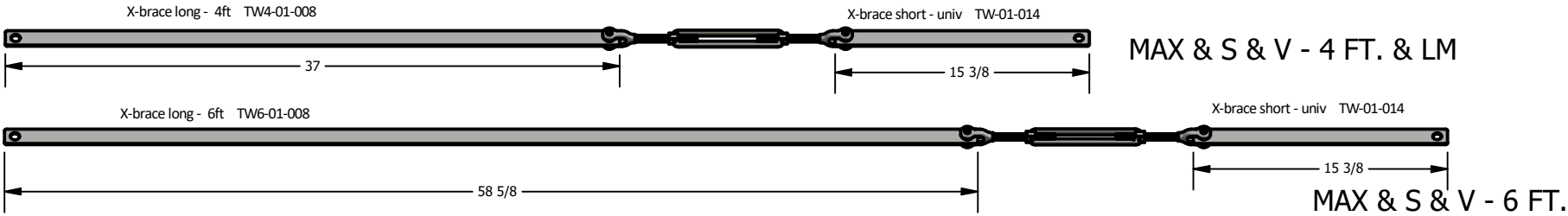
Attach the left channel using the four bolts.

Bag FT-15 Channel/Frame Hardware



V frame shown above with the left channel — Ledger board on top horizontal not shown here.

TREADWALL X-BRACE ASSEMBLY COMPARISONS



Bolt on the right channel (Has motor box and speed control). Hand tighten only.



The bottom shaft has one loose sprocket (no set screw: intentional). Place either side.

Getting shaft into the bearings on the V requires lifting the shaft up through the slot at the bottom of the channels. (Not shown in these older images). The black plate goes to the outside of the channel. Mount the slot to the front - the three mounting holes will only align in this orientation. Bag FT-50.

IT IS CRUCIAL that the bolts holding the bearing to the black plate be left loose in order that the bearing may pivot. These are pre adjusted at the factory and should not be tightened.

Older frame shown, but shows mount the bottom shaft with the loose sprocket on the right.

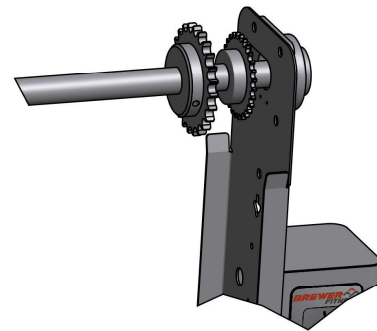
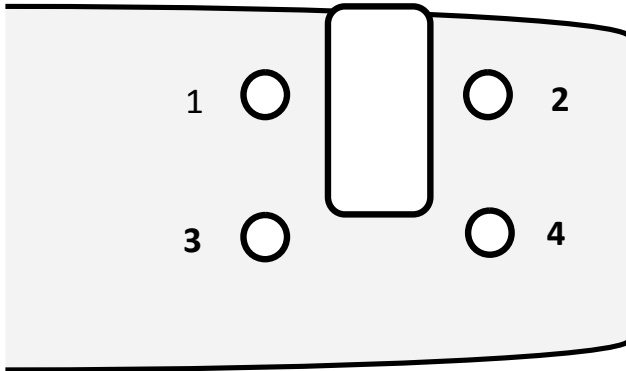


Image of older unit but shows bearing slot to the front.

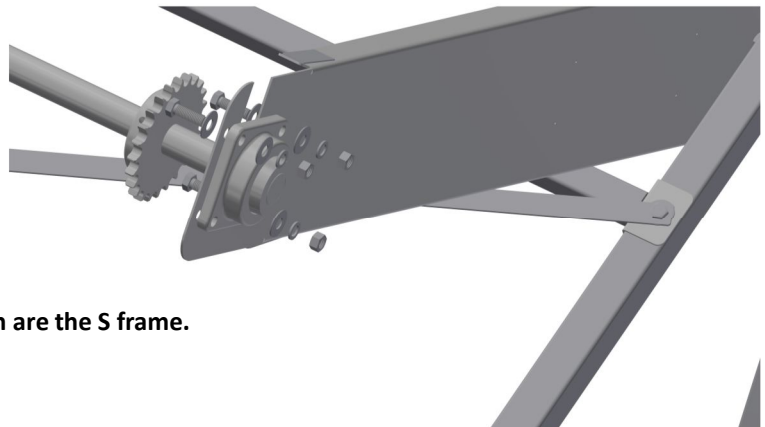
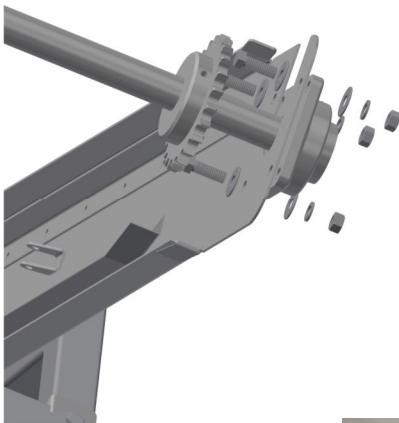


Mount the top shaft. The shaft has a right and left side: the right side has TWO sprockets. Install the first three nuts per diagram (Bag FT-30). Leave the first bolt out for now. Leave as loose as possible so that the shroud can be slipped under the bearing in the next step.

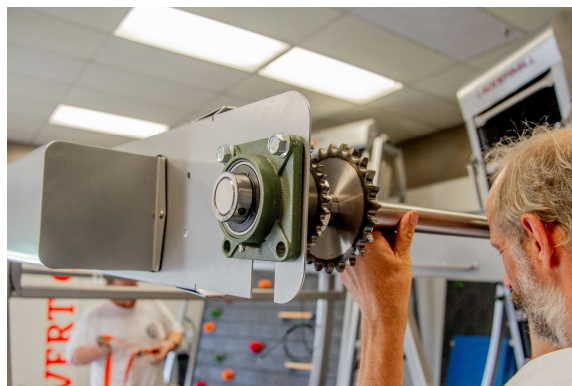
On the V units, **this will be done with wall vertical**, and using two good step ladders. The process is exactly the same.



Right side with two sprockets.



Images shown are the S frame.

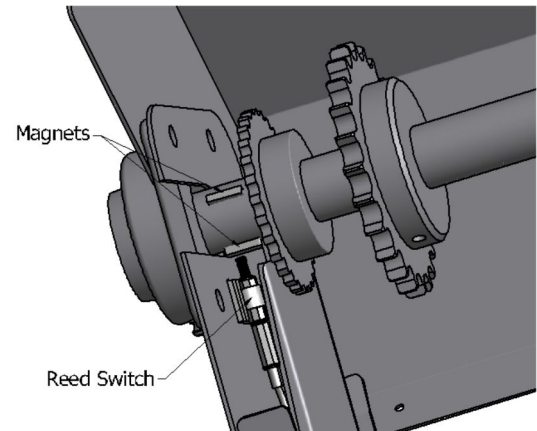


Bring the power wire from the top of the right A-frame through the black rubber grommet on the channel near the top of the frame and feed into the channel.

The grommet ship installed: use a small screw driver to pry is out, feed the power wire in and re-insert the grommet Inside about a foot below the grommet, plug it into the main wiring harness. There is only one place the plug can go.

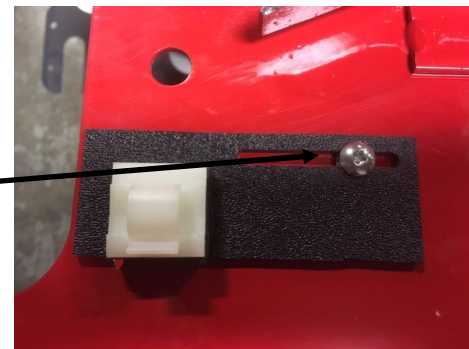


Image shown is older M4 frame



There are three magnets, a small bolt and a sensor mounted on plastic plate in the hardware box (Bag FT-70). The three magnets are placed evenly around the upper shaft, just to the right of the small sprocket. Place them flat side down and they will stay on by magnetic attraction. There is usually a paper guide attached to the shaft.

The sensor and plate are installed using the 10-32 screw. The pre-installed wiring harness is plugged into the sensor. The sensor plate should adjusted so that the magnets pass about 1/8" above the sensor.



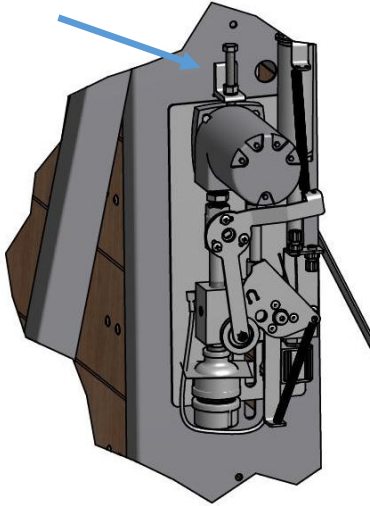
Sensor plate shown without mounted sensor

Remove the hydraulic box cover and bottom access plates. Leave all off until the end of assembly.

(Model S shown.)



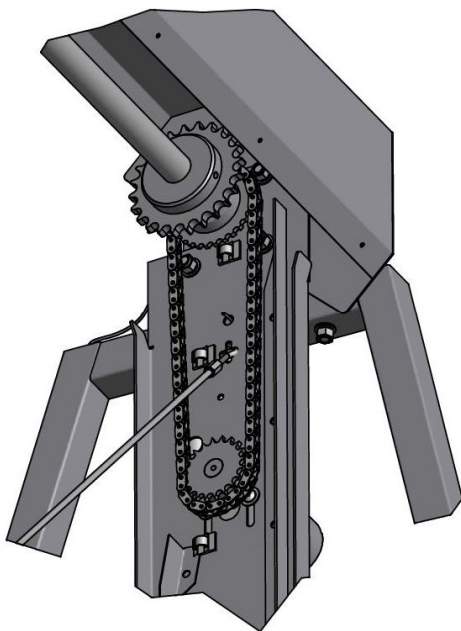
Pushdown Bolt



The hydraulic pump is mounted in slots so it can slide up and down. While pushing it up as high as it can go, install the drive chain by wrapping it around the pump sprocket and the main shaft as shown. A master-link is provided to connect the chain.

Once the chain is attached, lower the pump to take up the chain's slack. There is a long push-down bolt above the pump. Adjust it down far enough to remove slack in the chain, but don't make it too tight. Too much tension will make the Treadwall run sluggishly. Tighten the locking nut on the push-down bolt when done.

Older image—shroud shown

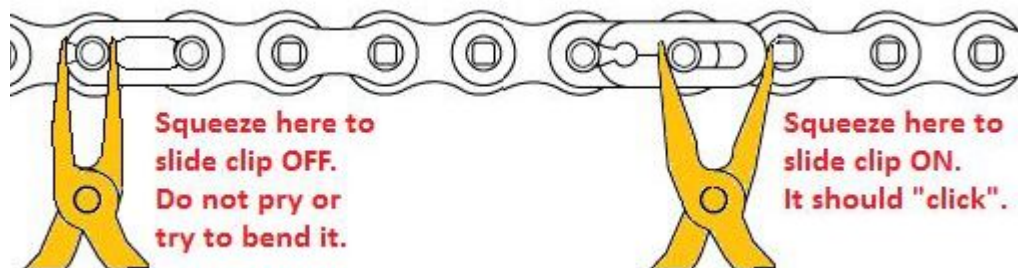
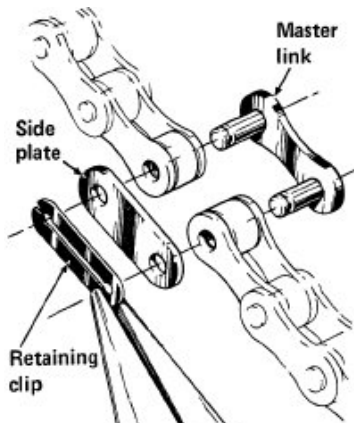


Helpful Note:

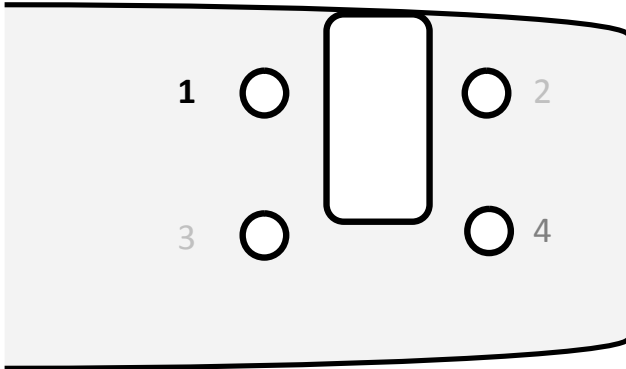
To disassemble the master-links use a pair of pliers or a flat blade screw driver to press and slide the retaining clip along the side plate in the direction opposite the open end of the retainer clip.

To install the Master-links assemble them as shown in the diagram below. The retaining clip must fit into the small grooves on the master-link. Then, press and slide the retaining clip into position towards the open end of the retaining clip.

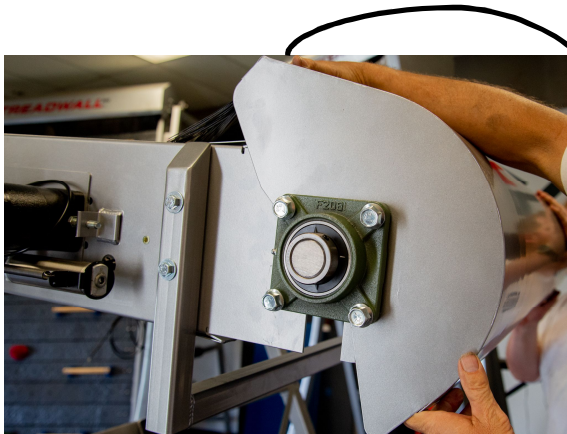
When correctly installed the retaining clip is solidly in the grooves of the master-link laying flat against the side plate.



Mount the top shroud. Using two persons, slide the shroud under the top bearing (brush to front) and insert #1 bolt. Then pivot the shroud up and when firmly pushed forward all the way, tighten bolts #1 and #2. As step, tighten bolt #3.



Slide the shroud under the bearing and Insert the last bolt (#1) in both sides. (The image above is an older unit and rotates the opposite way, but exactly the same process)



Rotate the shroud and the slots into the pre-installed bolts. Holding the shroud tight in place tighten bolts (#1 and #2) firmly. Tighten #3 when shroud is mounted.

Install the spacer bar. This is a plain bar that rest on two "V" shaped supports and holds the channels apart at the correct width.. There is double sided tape on the inside of the "V" supports—peel off the while tape cover and push the spacer bar down on each side into the "V" support brackets. It is tight and may require some force to get the bar into the brackets



Mount back guard. Note the guard is oriented with angled edge down. Bag FT-40



The main chains come in 2 sections/boxes for each side: there is a standard box plus either a 10', standard 11' or 12' box depending on wall size. Put a set of the correctly paired boxes on each side.

With the speed control set to "0", hang one section on each side over the upper sprocket making sure the tabs are facing OUT and that they aligned with each other on the sprockets (side to side, see below). Take your time aligning the two: you can use the space bar to gauge alignment: see image below. One end of each section has a master link.

M4 Pro-t parts shown



ASSEMBLING MAIN CHAINS

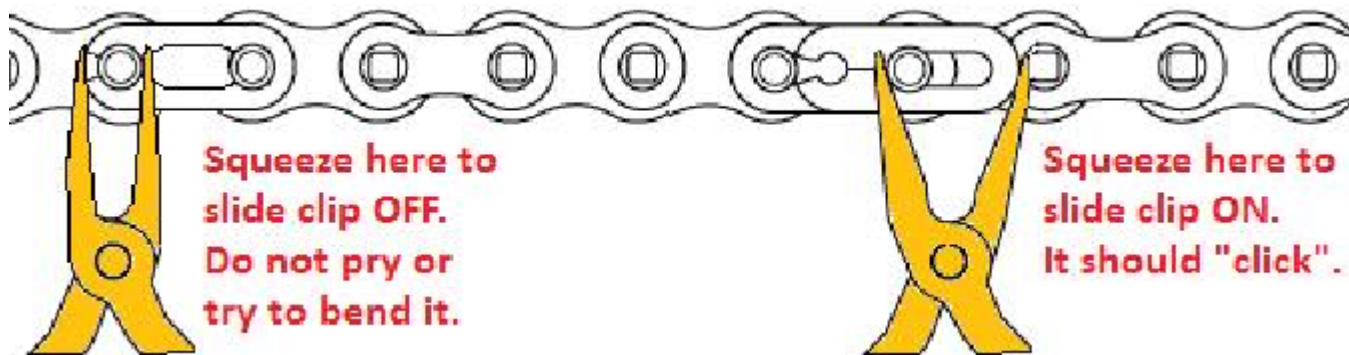
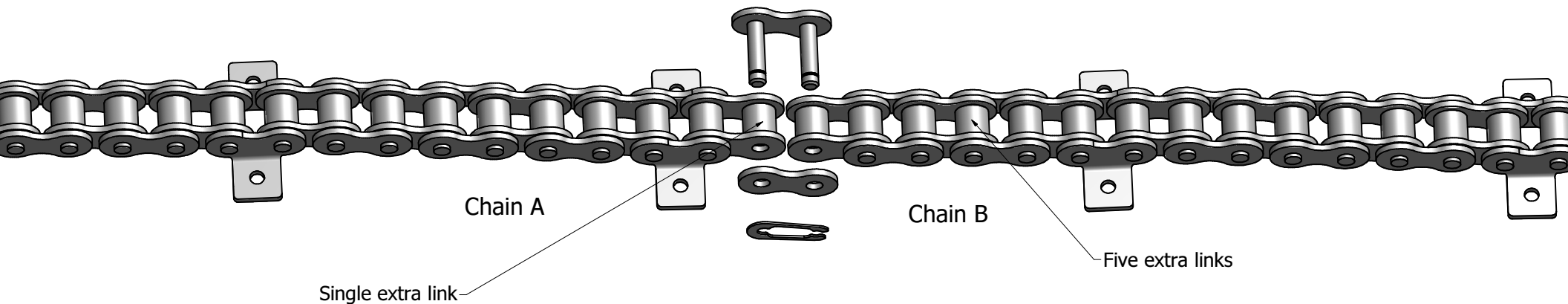
Each Treadwall main chain come in two boxes that must be assembled to a full length chain using a masterlink.

If the boxes are marked "short" and "long", use one short and one long for each chain. If the boxes are unmarked, use any two boxes to make each chain.

Note that the ends of the chains are different as shown below. Attach the end of chain A with a single extra link to the end of chain B that has five links. This will insure that the spacing between the chain tabs is correct and uniform.

Also, make sure that the tabs are all facing the same direction as in the picture.

The masterlinks are located at one end of each length of chain.



Brewer's Ledge Inc.
800-707-9616
www.treadwall.com

CHAIN ASSEMBLY DRAWING REV .1
6-11-14



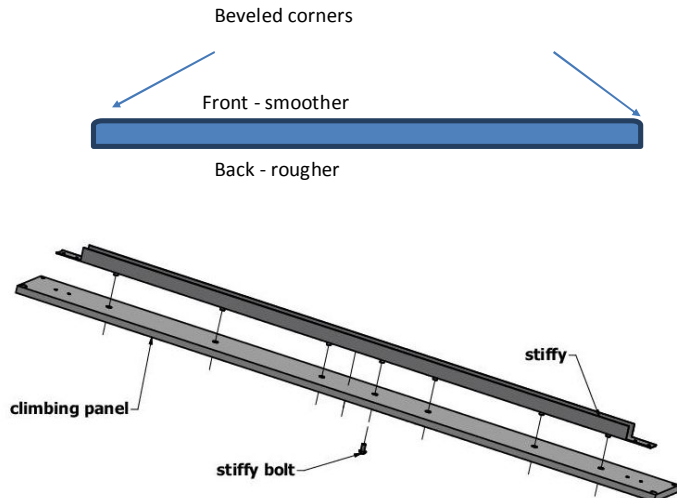
Checking side to side alignment of the main chains using the spacer bar as a reference guide.



Attach lower chains. Start by attaching the back side of each chain: make sure the long ends go with the short ends, double check all the spacing is correct.

Wrapping the chain under the bottom sprocket, and lift up the bottom shaft (the bearings will swivel upwards) and join the two ends with a master link. Do both sides and double check the alignment. Test the chains by rotating them around to make the tabs are facing out, they are aligned side to side, and everything rotates smoothly.





Each panel has a metal stiffener that must be mounted on the back side before installing the panel. Sometimes the back side can be hard to identify: pick the best side if in doubt.

Place the panel face down on a piece of cardboard, line up the stiffy, and press it into place - stepping on it with your foot if necessary.

A short round-head "stiffy bolt" is screwed firmly into the middle hole from the front of the panel as shown to hold it in place.

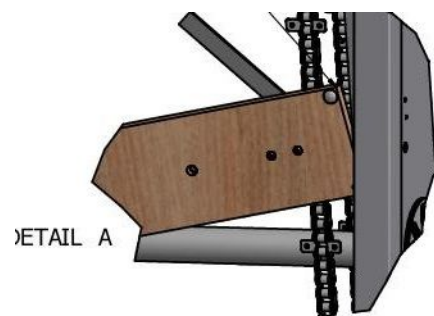
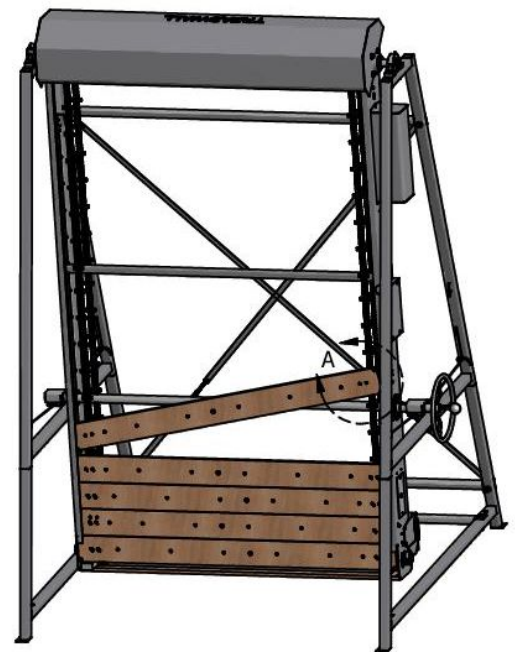
The best tools to use for installing panels: A battery powered electric drill with a #2 Philips bit and a socket wrench with a 3/8" socket. Do not overtighten the screws. If your drill has a clutch, use a low setting so that the head of the screw seats down but does not dig into the panel.

Pay attention when putting the panels in to alternate between having a wide or narrow gap between the right most holes.

After installing the first panel, pull down on the chains to rotate the panel completely around the circuit. As it passes the lower shaft, adjust the sliding sprocket to the proper width so that the panel passes easily without binding. **No set screw is used for this sprocket.**

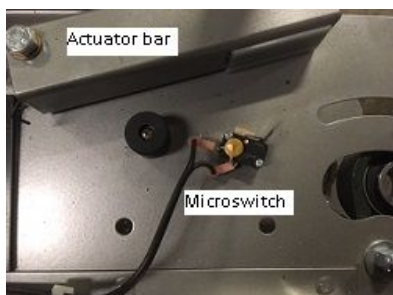
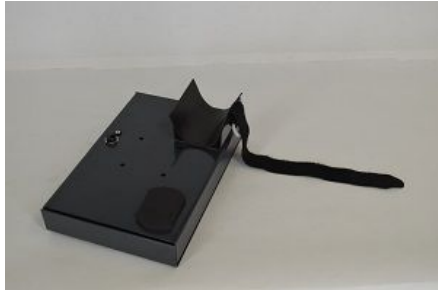
SEE THE NEXT PAGE BEFORE ADDING MORE PANELS - THERE ARE A FEW TESTS TO DO.

M6 Pro (older model) shown



Initial Testing Systems

Mounting display with strap bracket: make sure the rubber padding goes around the frame, adjust the height as desired, and secure the Velcro strap tightly.



INSIDE VIEWS:
actuator and
microswitch ar-
rangements.

Open - switch
not activated,
wall rotating

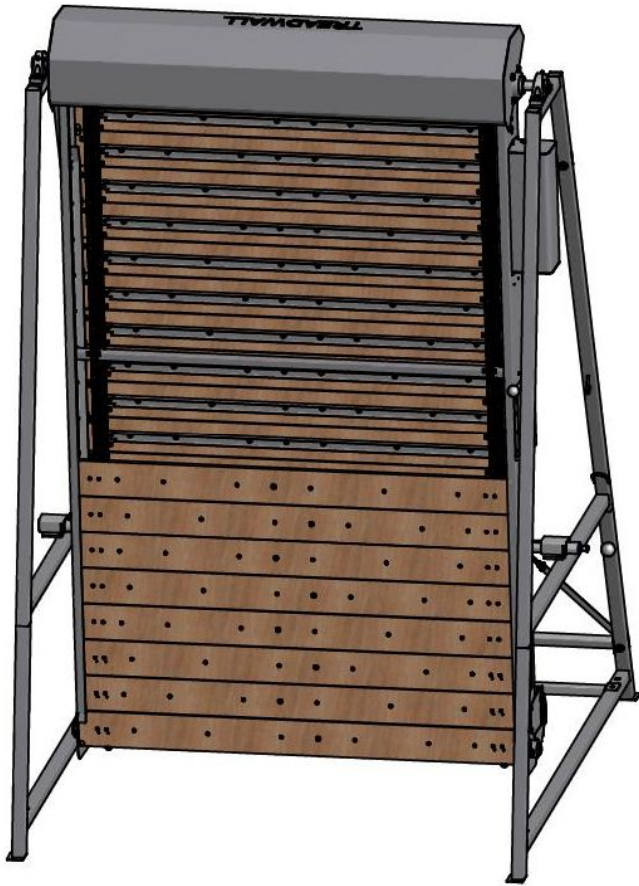
Closed - switch acti-
vated, brake on, wall
stopped



Mount the counter-timer on the right frame: the ball mount is pre installed. The sensor wire and power wire are pre installed and plug directly into the rear of the counter.

Plug in the transformer to an outlet and connect to unit at the bottom of the right frame: and do the following tests:

- ◇ Make sure display turns on—few seconds are required. Touch the screen if needed to activate.
- ◇ Slide speed lever to fast, push in auto stop actuator at bottom (see images to left) while pulling down on the main chain and verify the chain is stopped. This tests the auto-stop system.
- ◇ The display should start to count once the chains move 2-3 feet. Adjust sensor at the top if needed.
- ◇ Check the drive chain tension—adjust push down bolt if needed. Do not over tighten—the chain should have @2 cm flexibility.



Continue installing panels, alternating the hole spacing. Use the speed control lever to control the descent of the panels.

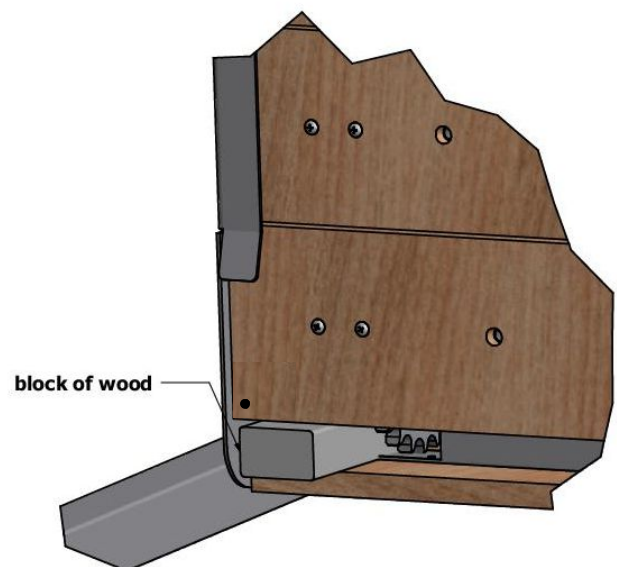
As you install panels they will move down by their weight. There will come a point where they start to move up of their own, and then you will have to push them down - harder and harder as you put more on. This is because there are more panels at the back of the wall - heavier than the panels in the front.

When this happens, insert blocks of 2x4 wood between the bottom panels as shown below to jam the wall and prevent it from backing up. Use two blocks - one at each end of the panels.

The last three panels are put in from the bottom, slid up to meet the other panels, and bolted on.

Remove the black covers from the rectangular access holes at the bottom of the channels so you can get to the inside when putting on these last three panels.

Leave the last panel off until the end of the installation - after the climbing holds have been put on and everything has been tested according to the final test at the end of these instructions.



Mount holds, Ladder line set if used, install mat. Check all bolts, auto stop, display, etc. before mounting the last panel. To mount the last panel remove the black access hole cover at the bottom of each channel and slide the panel up from the bottom, using the access hole to hold the nuts behind while installing. Replace the access covers and hydraulic box cover. After testing the machine, make sure the manual goes the owner.

When everything is in place test the wall at different angles and speeds. Climb 200 feet at least and look for loose holds, make sure the auto stop is working, and the when changing wall angles the bottom covers are not pushed (Angle cassettes are aligned).

Mount the last panel, re-mount the hydraulic box cover, and re-install the two access holes at the bottom of the channels.

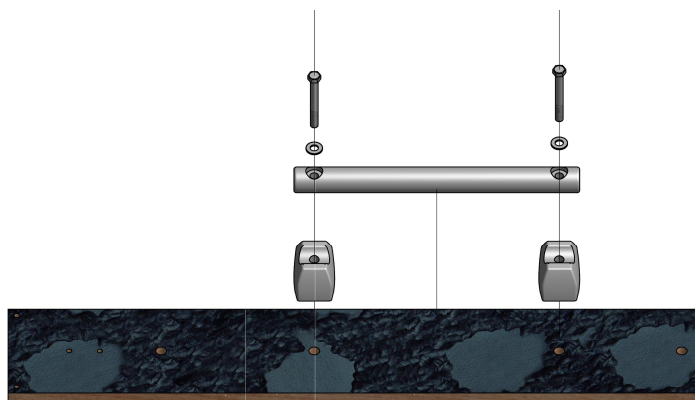
Install the mats.



Installing the optional Ladder Line™

The Ladder Line rungs can be installed anywhere you wish on your Treadwall, but we recommend starting with an even spacing of the rungs with little or no deviation from side to side. This provides the best platform for simple aerobic training and fast sprinting climbs.

The Ladder Line is an excellent way to introduce the Treadwall to those who have not climbed in the past or feel nervous about the Treadwall.



Installing the climbing holds—Route Setting!

Placing the climbing holds onto your Treadwall is called route setting, and the individual climbs you set up are called routes.

The standard set of Treadwall climbing holds (Set A) comes with 36 holds (4 foot units) and 45 holds (6 foot units). There are 3 colors: green, blue and red, The green is the easiest, blue medium and red the hardest. All are finger-friendly. You can set individual routes by only using hold of a given color, or you can set up the entire wall and label individual routes with colored pieces of tape or rules about which are for feet, for hands, etc.

One of the best ways to start is to create a route around the wall using just green holds: place holds approximately every 2-3 panels. Try climbing when done, adjust as needed. If you find any move too difficult just move a nearby hold of that color to make the climb feel as hard or as easy as you like. Continue with the next colors. See hold sheet in hold box.



Assemble holds with a 3/8 bolt and a 5/16" Allen wrench. If a bolt feels tight, do not force: try gently inserting bolt without a hold first. Make sure the bolt goes in fully. Try again with the hold loose on the bolts to allow the bolt to align with the threads.

Climbing Hold Rules

There are 2 important rules to remember when purchasing and attaching holds for your Treadwall.

1. *Holds can not be more than 2.5" tall, this is the projection from the climbing surface.*
2. *Holds can not overlap two panels, the panels must be free to come apart and together as they rotate around the Treadwall.*

Final Tests

Before installing the final panel, inspect the inside of the Treadwall:

1) There may be air trapped in the hydraulic oil after transport: this will cause the unit to run quite rough (cavitation) until the air is slowly released into the reservoir. The amount of air trapped varies, but it may take 10-15 minutes or more of use to begin smoothing out. The system will get smoother and smoother over time.

2) Make sure the timer-counter is working properly. If it does not count feet as the wall is moving, check that the magnets and sensor are properly installed and adjusted

3) Check the auto-stop function. Start climbing at a moderate speed. If you stop moving up, the wall should continue down and stop moving downward when your foot reaches the bottom of the wall and triggers the micro switch at the bottom of the right channel. Do this test at all the angles. The micro switch is pre-set at the factory, but it can be adjusted for sensitivity if required by adjustment.

4) Check the drive chain at the top of the right channel. The slack should be adjusted out of it, but it should not be too tight. After climbing for a few minutes, some slack might develop which should be adjusted out. This chain will stretch over time, and should be adjusted after about a month of service. There is an inspection hole in the channel to check the chain so that a climbing panel will not have to be removed.

5) Check that the chains are properly synchronized. The climbing panels must be parallel to the spacer bar. If the panels droop down on one side or the other, the chains are out of sync. We have an easy way of fixing this, contact us (800-707-9616 or sales@brewerfitness.com) to get help.

LIMITED WARRANTY

Treadwall® rotating walls and Laddermill® ascenders

1. WHO IS COVERED?

The original purchaser ("Original Purchaser") may only enforce this warranty.

2. ORIGINAL PURCHASER OBLIGATIONS

The Original Purchaser assumes full responsibility that the equipment purchased meets their specifications, capacity and other requirements, and for the condition and size considerations of the location in which the equipment will be used.

3. HOW LONG IS THE WARRANTY?

According to the following schedule, Brewer's Ledge Inc. (d/b/a Brewer Fitness) warrants to the Original Purchaser of its specified equipment that under normal maintenance the specified equipment will be free from any defect in materials or workmanship.

For Max, S and V Treadwall^{FT} models and Laddermill models:

Six years – Parts

One year – Electronics and labor

For Kore Home Treadwall^{FT} models:

Two Years – Parts

4. WHEN DOES THE WARRANTY BEGIN?

Warranty begins from date of delivery to Original Purchaser or date of installation in the case of assembly arranged by Brewer's Ledge or their authorized dealer and requires the Original Purchaser to be in compliance with the financial terms of the sales agreement between the Original Purchaser and Brewer's Ledge Inc. or their authorized dealer.

5. WHAT IS NOT COVERED

Normal wear and tear are excluded from this warranty. Damages caused by a lack of maintenance outlined in the owner's manual by the Original Purchaser are excluded from this warranty. No warranty shall be provided in the event the equipment is modified by Original Purchaser, for parts not approved by Brewer's Ledge Inc., or for warranty-related service other than by personnel authorized by Brewer's Ledge Inc.

Wear and tear caused by exterior use is not covered including with units ordered with any exterior upgrades. This includes water damage, UV damage, temperature related damage and surface (non-structural) oxidation.

Damage incurred by negligence during movement, assembly, or breakdown of the equipment by the Original Purchaser or personnel contracted by the Original Purchaser is excluded from this warranty. The sale of special tools and instructional materials to the Original Purchaser and any training of the Original Purchaser's staff by Brewer's Ledge Inc. related to the movement, assembly and break-down of the equipment does not imply any warranty against Original Purchaser negligence and does not void this exclusion. Brewer's Ledge Inc. reserves the sole right to determine the origin of damage as related to this provision.

6. LIMITATION OF DAMAGES AND IMPLIED WARRANTIES

Except as provided herein, Brewer's Ledge Inc. makes no express warranties; implied warranty of merchantability or fitness for a particular purpose is limited in its duration to the duration of the written limited warranties set forth herein.

In no case shall Brewer's Ledge be liable for any special, incidental, or consequential damages based on breach of warranty, breach of contract, negligence or any other legal theory. Such damages include but are not limited to, loss of profits, loss of use of the equipment or any associated equipment, the cost of capital, the cost of substitute equipment, facilities or services, downtime, the claims of third parties, including customers, and injury to property.

This limitation does not apply to claims for personal injury where such limitation would be a violation of the applicable law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

7. TERMS OF WARRANTY

The terms and conditions of this warranty are applicable as between Brewer's Ledge Inc. and Original Purchaser to the sale of equipment to Original Purchaser.

STATE LAW RIGHTS

This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.

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www.brewerfitness.com



Website

WWW.BREWERFITNESS.COM

Email

SALES@BREWERFITNESS.COM

Address

Please contact us anytime to come by for a visit!

87 York Avenue

Randolph, MA 02368 USA

Phone

1-781-961-5200

Hours: 9 am to 5 pm E.S.T.