Vitality™ Series Selectorized Inner/Outer Thigh Assembly Guide

Assembly requirements

Precor recommends at least two people for this installation. DO NOT attempt assembly by yourself.

When assembling the equipment, we recommend you:

- Follow the steps in the order listed in this assembly guide.
- Unpack the box and assemble the equipment close to where you plan to use it.
- Locate the equipment at least 40 inches (1 meter) away from walls or furniture on either side of the equipment, and 40 inches (1 meter) away from objects behind or in front of the equipment.
- Assemble the equipment on a solid, flat surface, so that it remains level and stable.

Required tools

- Adjustable wrench
- Torque wrench
- Rubber mallet
- Hex wrench sets, metric and standard, with extensions
- Socket wrench set, metric and standard, with extensions

Equipment dimensions: W31.7 x D65.3 x H60 inches/W80.5 x D165.9 x H152.4 cm (in-use) - W71.1 x D65.3 x H60 inches/W180.7 x D165.9 x H152.4 cm (idle)

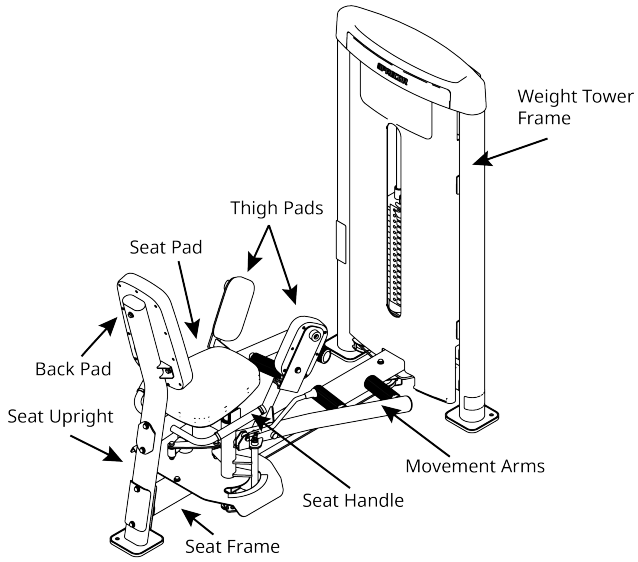


Fig. 1

Begin Assembly

CAUTION: Do not fully tighten fasteners until instructed to do so.

The equipment is designed to be freestanding; however, it can be bolted to the floor for extra stability. Precor highly recommends that the equipment be bolted to the floor to reduce the risk of toppling the equipment due to improper use. Since floor construction varies, please consult a professional building engineer for proper fastening.

Assemble frame

CAUTION: The seat frame assembly is heavy. Do not attempt to assemble without assistance.

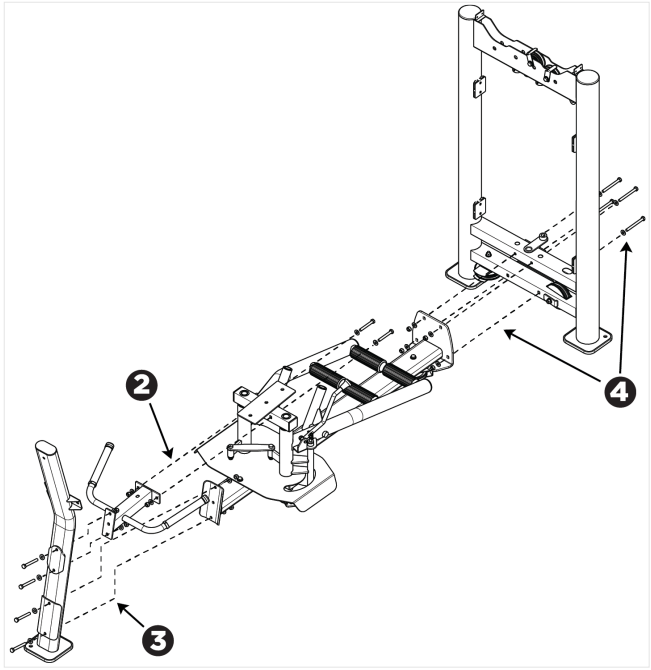


Fig. 2

1. With assistance, carefully remove the seat frame assembly from the box and place perpendicular to the weight tower frame. Remove the zip tie that holds the movement arms together.

2. 2. Attach the seat handles to the seat frame assembly using:
   - 2 – M10 x 75 mm hex head bolts
   - 2 – M10 nylon lock nuts
   - 4 – 11 mm flat washers

3. 3. Attach the seat upright to the seat frame assembly using:
   - 4 – M10 x 80 mm hex head bolts
   - 8 – 11 mm flat washers
   - 4 – M10 nylon lock nuts

4. 4. Attach the seat frame assembly to the weight tower frame using:
   - 4 – M10 x 100 mm hex head bolts
   - 8 – 11 mm flat washers
   - 4 – M10 nylon lock nuts

Partially tighten the fasteners so the weight tower frame and seat frame are stable.

Attach movement arms

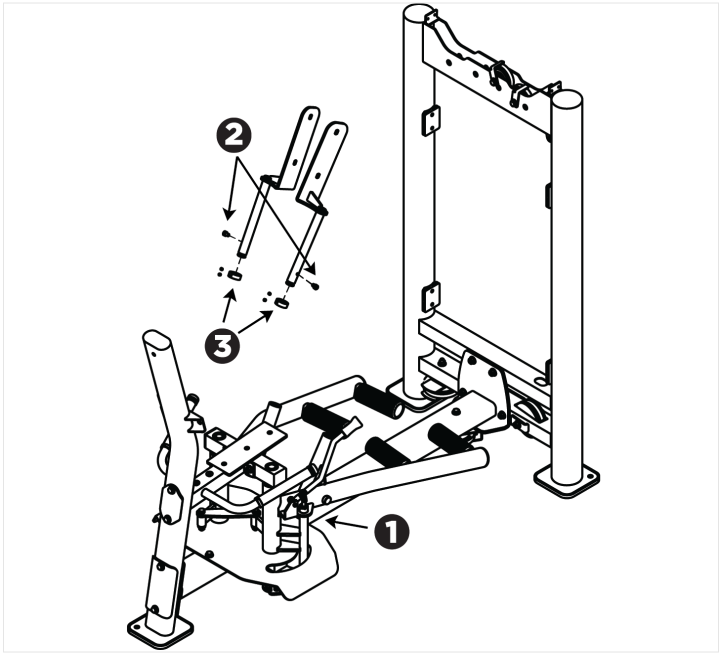


Fig. 3

1. 1. Slide one swivel arm into each sleeve on the movement arms.
2. 2. Near the bottom of the swivel arms are 90-degree slots that limit the rotation of the thigh pads. Secure the swivel arms into position on the movement arms using:

   2 – M8 x 10 mm screws
3. 3. Slide a locking ring over the bottom end of each thigh arm that protrudes past the bottom of the sleeve on the movement arm. Tighten the two ¼-inch set screws on each locking ring to fix it in place and prevent the thigh arm from pulling out of the sleeve on the movement arm.

   Note: Verify that the locking ring fits loosely against the swivel arm, then tighten the set screws. The swivel arms should be able to rotate freely. If the locking ring is too tight against the swivel arm, then rotation of the swivel arm will be too stiff.

Install weight stack tower

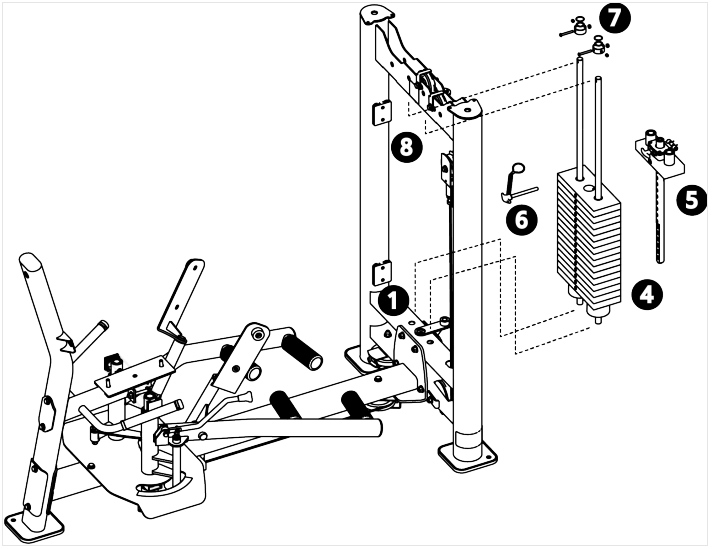


Fig. 4

1. 1. Insert the guide rods into the holes at the bottom of the weight tower frame.

   Important: A hole passes through one end of each guide rod. Be sure to insert the end without the hole into the bottom of the frame.

   2. Pull the guide rods away from the frame, keeping their lower ends engaged in the bottom of the frame. Slide one weight stack bumper over each guide rod, narrow end up.

   3. Check the guide rods for silicone lubricant. If you do not find any, add some of the lubricant supplied in the hardware kit to the guide rods.
4. 4. Carefully slide **sixteen** 10 lb. (4.5 kg) weight plates onto the guide rods, one by one.
5. 5. Slide the top weight plate with weight stack stem onto the two guide rods and lower the stem through the center holes of the weight plates.
6. 6. If the cable assembly is attached to the top weight plate, then unscrew it and remove it at this time. The weight selection handle should be on the right side facing the user.
7. 7. Secure the weight stack assembly to the weight tower frame. Slide the guide rod locking collar (O-rings on top) onto the guide rods (the smaller diameter shoulder on the collar should be facing up). Re-align the guide rods with the mounting holes at the top of the weight tower.
8. 8. Have your assistant hold the guide rods in place. Slide the collars up until the shoulder of each collar fits into the tower frame. Insert one M6 × 45 mm button head cap screw through the holes in each collar and each guide rod, then attach an M6 nylon lock nut to each button head cap screw. Tighten the button head cap screws securely, then attach and tighten the M8 set screws using the S4 hex key.

   9. Spray a lint-free cloth with isopropyl alcohol and wipe the front of the weight plates clean. Use a second lint-free cloth to remove any remaining alcohol before applying labels.

   10. Apply the weight plate labels (select LBs or KGs) to the left of the weight selection holes.

Install add-on weight assembly

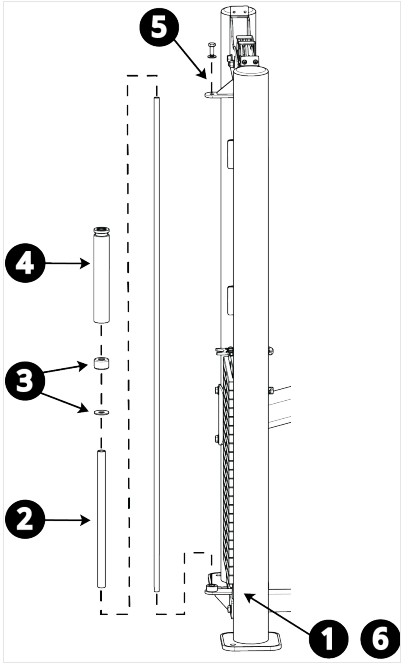


Fig. 5

1. 1. Insert the lower end of the 14 mm guide rod into the retaining ring at the bottom of the weight tower frame.

   Note: The rod has a threaded hole in one end for a screw and a hole in the side towards the other end. The threaded screw hole in the end for the screw should face up so it can be secured in step 5.

2. 2. Slide the 211 mm support tube onto the guide rod from the top down.

3. 3. Slide the support ring onto the guide rod, followed by the rubber bumper.

4. 4. Slide the 5 lb (2.5 kg) add-on weight onto the guide rod, making sure that the groove is at the top end of the weight.

5. 5. Attach the top of the guide rod to the bracket at the top of the weight tower frame using:

   1 – M10 x 25 mm hex head bolt

   1 – 11 mm flat washer

6. 6. Fully tighten the M8 set screw in the retaining ring using the S4 hex key.

Route the cable

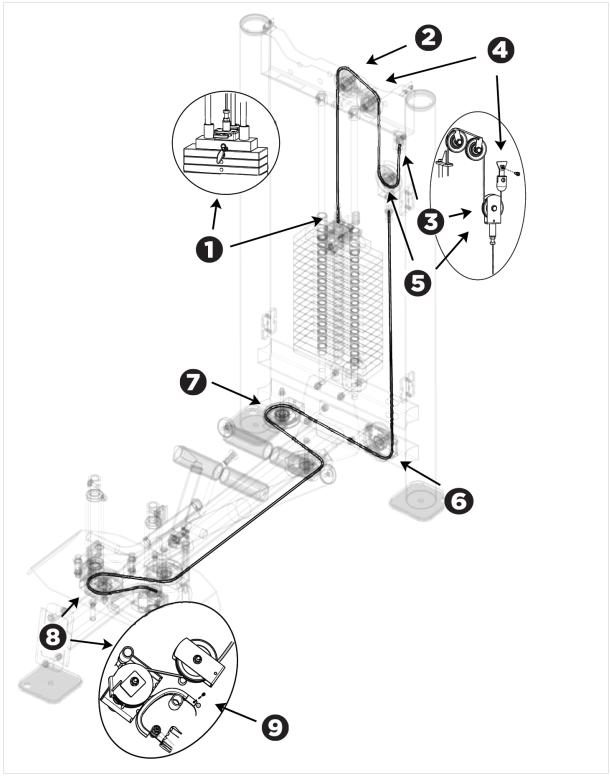


Fig. 6

Units with two or more pulleys may require removal of pulley covers to route cables.

1. 1. Screw one end of the cable assembly into the top of the weight stack stem. Remove the cable socket and its cover from the other end of the cable.

   CAUTION: Be sure to complete seven (7) turns/threads of the cable bolt into the fitting, and then tighten the jam nut. There should be a maximum of 1-1/8 inch (29 mm) between the bottom of the cable bolt head and the bottom of the flange lock nut (see Adjust cable tension section).

2. 2. Pull the cable through the top of the weight tower frame, over the top of the dual pulleys and under the cable retaining brackets on the pulleys. Thread the cable down through the weight tower frame.

3. 3. Route the weight stack cable through the floating pulley bracket.

4. 4. Secure the end of the cable to the cable connection on the cross beam of the weight tower frame.

5. 5. To route the movement arm cable, start at the floating pulley. Screw one end of the movement arm cable into the floating pulley.

   CAUTION: Be sure to complete seven (7) turns/threads of the cable bolt into the fitting.

6. 6. Route the end of the movement arm cable down through the lower cross frame, under the lower vertical pulley and over to the opposite end of the weight tower frame.

7. 7. Continue to route the end of the movement arm cable around the horizontal pulley, and over to the horizontal center pulley.

8. From the horizontal center pulley, route the end of the cable under the seat frame, to the right of the center pulley under the seat, around the outside of the left cam, and attach the end of the cable in the cable slot on the right cam.

9. Remove the screw, install the cable, and replace the screw.

Tighten all frame mounting hardware

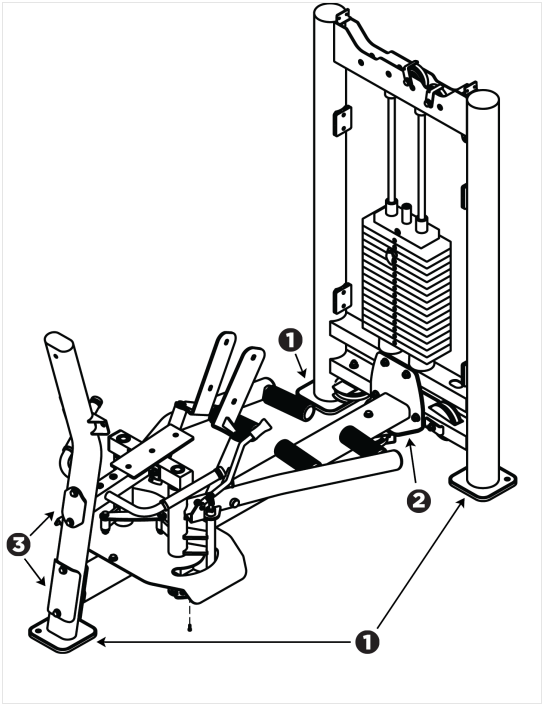


Fig. 7

1. Check that the weight tower and seat frame are sitting evenly on the floor.

2. Start at the weight tower, and tighten the mounting hardware at the base support, then at the cross support.

3. On the seat frame, tighten the mounting hardware at the base support, and then at the cross support.

Adjust cable tension

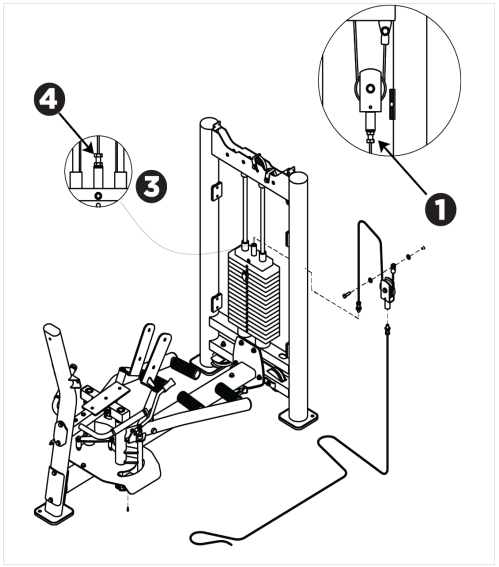


Fig. 8

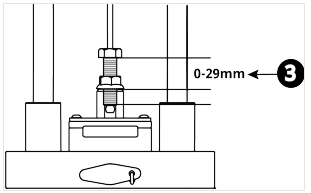


Fig. 9

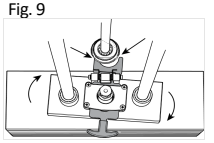


Fig. 10: Misaligned

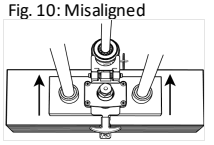


Fig. 11: Aligned

1. Start at the cable assembly connection on the floating pulley. Be sure to complete at least seven (7) turns/theads of the cable bolt into the movement arm cable connection. Tighten the lock nut.

2. Place the weight selection pin in the top weight.

3. Screw the cable bolt into the selector stem until the cable meets the following requirements:
   — At least seven (7) turns/threads (minimum) of the cable bolt into the weight selector stem.
   — A maximum of 1-1/8 inch (29 mm) between the bottom of the cable bolt head and the bottom of the flange lock nut.
   — No excess slack remains.
   — The top weight begins to separate from the second weight.
   — The cable is just loose enough to permit insertion of the selector in into each of the weight plates.

4. Hold the weight tower straight while tightening the locking jam nut against the selector stem. If you do not hold the weight tower straight, it can twist (see Figure 10).

5. Once tightened, verify alignment between the selector and the add-on weight.

6. Check the adjustment by inserting the weight pin into every weight plate hole. The weight pin should slide easily in and out of each weight plate.

Attach the pads

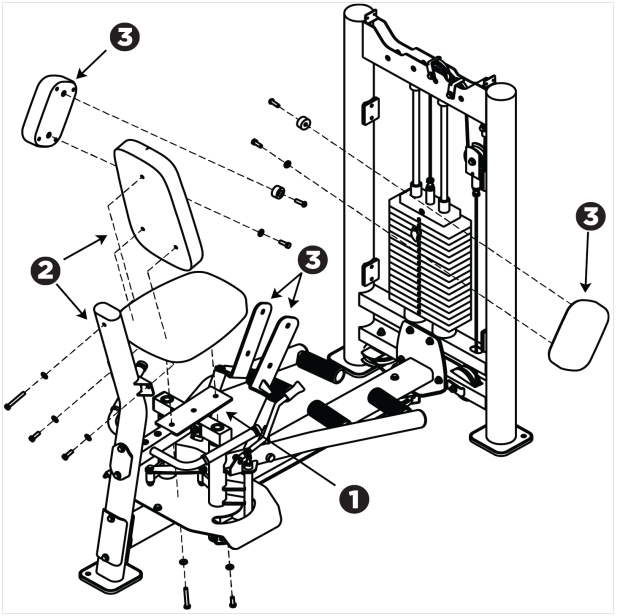


Fig. 12

1. Install the seat pad to the seat post using:

   Note: The narrow end of the pad should face the weight tower side.

   1 – M10 x 85 mm hex head bolt (rear of seat)

   1 – M10 x 30 mm hex head bolt (front of seat)

   2 – 11 mm flat washers

2. Install the back pad to the seat upright using:

   1 – M10 x 75 mm hex head bolt (top of back pad)

   2 – M10 x 30 mm hex head bolts (bottom of back pad)

   3 – 11 mm flat washers

3. Install the thigh pads to the swivel arms.

   Note: The seam on the thigh pad should face the floor.

— For the top mounting location, use an M10 x 35 mm button-head screw with a rubber bump washer.

— For the bottom mounting location, use an M10 x 30 mm hex head bolt with an 11 mm flat washer.

Install weight stack shroud and top cap

The inside shroud has a slot for weight selection. Both shrouds have three slotted tabs on each side that fit into the shroud clips mounted to the inside of the weight tower uprights.

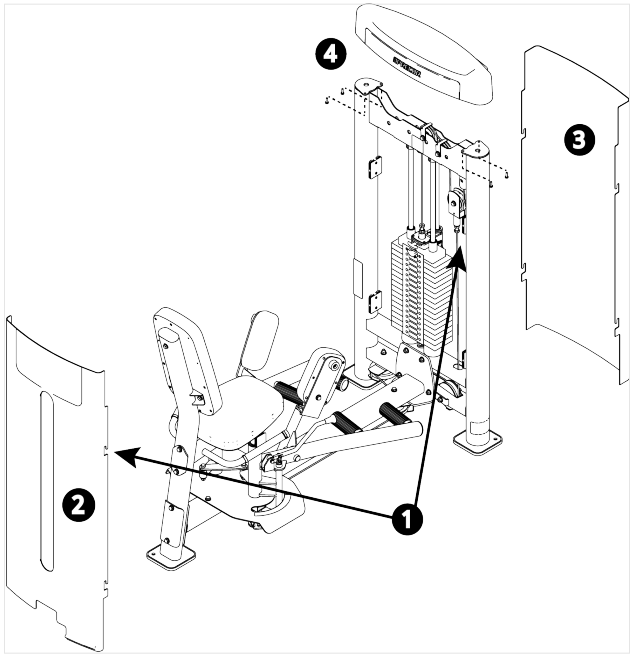


Fig. 13

1. Align the slotted tabs on the inside shroud with the shroud clips on both sides of the weight tower.
2. Press the hooks into the clips and lower the shroud securely into place.
3. Repeat steps 1 and 2 to install the outside shroud.
4. Place the top cap on top of the shrouds so that the top edges of the shrouds fit into the slot between the lip and the ribs of the top cap. Secure the top cap to the weight tower frame using:

   4 – M6 x 16 mm pan head Philips screws

Bolt equipment to floor

Precor recommends that the strength equipment be bolted down at all anchoring points. Bolting is made possible through the bolt holes on each foot. The inside diameter of each hole is 14.3 mm.

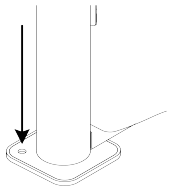


Fig. 14

NOTE As floor materials vary, it is important to consult a licensed contractor to advise on proper bolting techniques and appropriate fastener types.

CAUTION Standards can change. Precor recommends you keep apprised of your local industry standards. Precor shall not be held liable for failure to properly bolt the strength equipment to the floor.

Apply labels

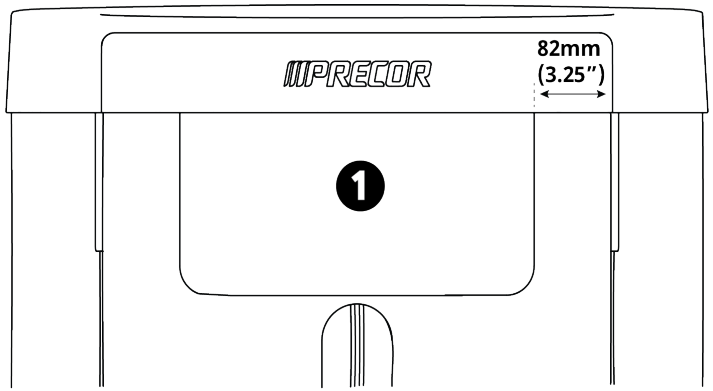


Fig. 15

1. Attach the **Instructional label** to the inside shroud under the top cap. Center and place the label flush with the bottom of the cap. To help center, align the right edge of the label 82 mm (3.25") from the edge of the raised section of the top cap.

Verify operation of equipment

Once assembly is complete, verify safe operation by checking the following points:

- Cable tension is correct and the cable is moving smoothly on its pulleys.
- Movement arm is stable and moves smoothly through its range of motion.
- Adjustment points are stable and move smoothly through their range of motion.

Disassemble the equipment

You may occasionally need to disassemble this unit to move it between rooms or buildings. In such cases, reverse the assembly steps in this manual to disassemble. After the unit has been moved, follow the steps in this manual to reassemble it.

WARNING: You will need assistance to disassemble this unit. The weight tower can become unstable during parts when disassembling. Make sure the weight tower is supported safely throughout the process and NEVER attempt to disassemble by yourself.

Maintenance information

It is important that the equipment be maintained in accordance with the Vitality Selectorized Line Maintenance Guide. Visit any Vitality Selectorized product page at ***www.precor.com*** to view the guide.