

**INFINITY SERIES****FUNCTIONAL TRAINER  
BOLT-DOWN BASE****MODELS 3020XA, XP, XS**

with Bolt-down Base

**3021X FLOOR MOUNT PLATE****BEFORE YOU BEGIN**


- **Ensure a site survey for equipment installation has been performed.**
- **Observe all governing codes and ordinances.**
- **Proper installation is the responsibility of the installer.**
- **Note to Installer:** Be sure to leave Installation Instructions and Operation Manual with the customer.
- **Note to Customer:** Keep Installation Instructions and Operation Manual for future reference.
- **Skill level:** Professional installation is required by qualified personnel as dictated by authority having jurisdiction.


Product failure due to improper installation is not covered under warranty.

 **READ CAREFULLY. KEEP THESE INSTRUCTIONS.**

**CUSTOMER SUPPORT**

If you have any questions regarding the installation or operation of the Functional Trainer after reading these instructions, contact Keiser Customer Support:


 **1 559 256 8000**

 **service@keiser.com**

 **keiser.com/support**

Telephone and Live Chat  
Monday–Friday 9 am to 5 pm PST

**KEISER CORPORATION**

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This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

## IMPORTANT SAFETY INFORMATION

1.  Read these instructions.
2. Heed all warnings.
3. Follow all instructions.
4. Professional installation is required by qualified personnel as dictated by authority having jurisdiction.
5. Proper installation is the responsibility of the installer.
6. Product failure due to improper installation is not covered under warranty.
7. It is the responsibility of the facility owner to adhere to local and regional building codes.
8. Follow all safety and installation instructions of the anchor and adhesive manufacturers.
9. Equipment must be mounted on level, solid concrete floor, minimum 5 inches (127 mm) thick.
10. All anchors must have a minimum embedment into concrete, regardless of any rubber/carpet/artificial turf, including underlayment covering the concrete. If mounting the equipment over floor covering, use appropriate length screw anchors (not supplied), along with the steel spacers provided, to bridge any gap between the concrete floor and the Floor Mount Plate.
11. Wear appropriate personal protective equipment (PPE); observe all governing codes and ordinances.
12. Safety Glasses required during installation.
13. Use a dust collection system when drilling; clean area using a HEPA vacuum. Avoid breathing dust.
14. Heavy Equipment: The Floor-mounted Functional Trainer weighs 118 lbs (54 kg). Help is required when handling the Functional Trainer to prevent potential muscle strain and/or back injury.
15. Crush Hazard: Keep feet clear when handling the Floor Mount Plate and/or the Functional Trainer.
16. Never connect Keiser pneumatic equipment to an air source that is capable of exceeding 120 pounds per square inch (psi) / 8.27 bar. Over pressurizing Keiser pneumatic equipment may cause tubing to burst, breakage of equipment, abnormal operation, or serious injury. Use only clean, dry, regulated compressed air at the rated pressure range of 100-120 psi / 6.89-8.27 bar.
17. It is the responsibility of the facility owner or the owner of the Functional Trainer to instruct users on the safe and proper operation of the equipment.


## CONVENTIONS USED


This Installation Instruction contains the following marks:

-  **WARNING:** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
-  **WEAR SAFETY GLASSES:** Safety glasses required during the procedure.
-  **CRUSH HAZARD:** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
-  **HEAVY EQUIPMENT:** Indicates help is required during lifting to avoid muscle strain and/or back injury.
-  **IMPORTANT:** Indicates information considered critical, but not hazard-related.

## CUSTOMER SUPPORT

If you do not understand these instructions or have doubts about the safety of the installation, assembly, or use of this product, contact Keiser Customer Support:

 1 559 256 8000

 [service@keiser.com](mailto:service@keiser.com)

 [keiser.com/support](http://keiser.com/support)

Telephone and Live Chat  
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## EQUIPMENT SPECIFICATIONS

Resistance Range:

50 lbs (23 kg) each Handle

Cable Length:

140 inches (3,556 mm) single Handle

70 inches (1,778 mm) both Handles together

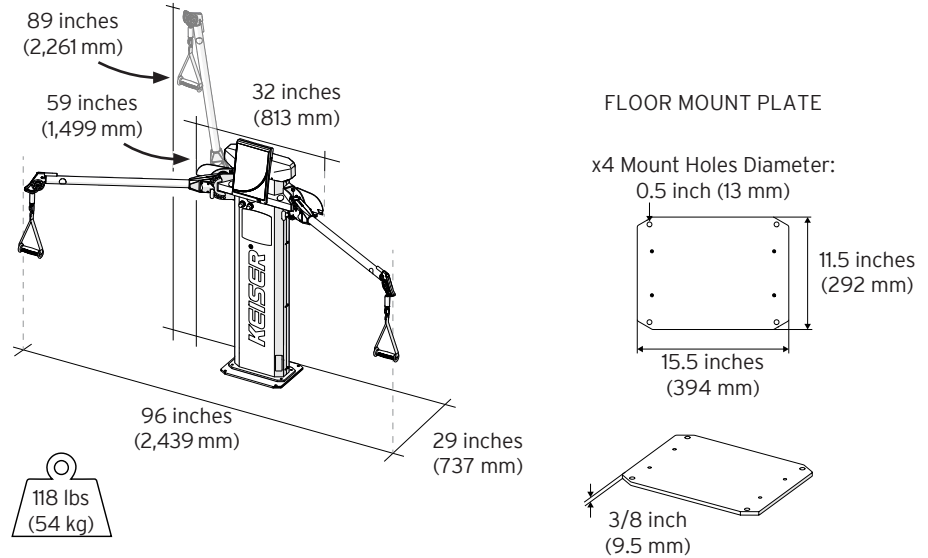


Figure 1. Equipment Specifications

## TRAINING SPACE

Plan Training Space accordingly to allow for full-range operation. Actual Cable Length may vary, based on Accessory type, user height, and the position setting of the exercise Arm.

To safely and effectively use your Training Space, remember to:

1. **Clear your Training Space:** Ensure there is enough space for safe access and operation of the equipment.
2. **Mark your Cable Max Limit:** Secure your Cable Accessory to the Cable. Walk your Cable Accessory out until the stop is reached. This is your Cable Max Limit. Place a marker on the floor (i.e. tape, keys, or a water bottle) to indicate your Cable Max Limit (see Figure 2).

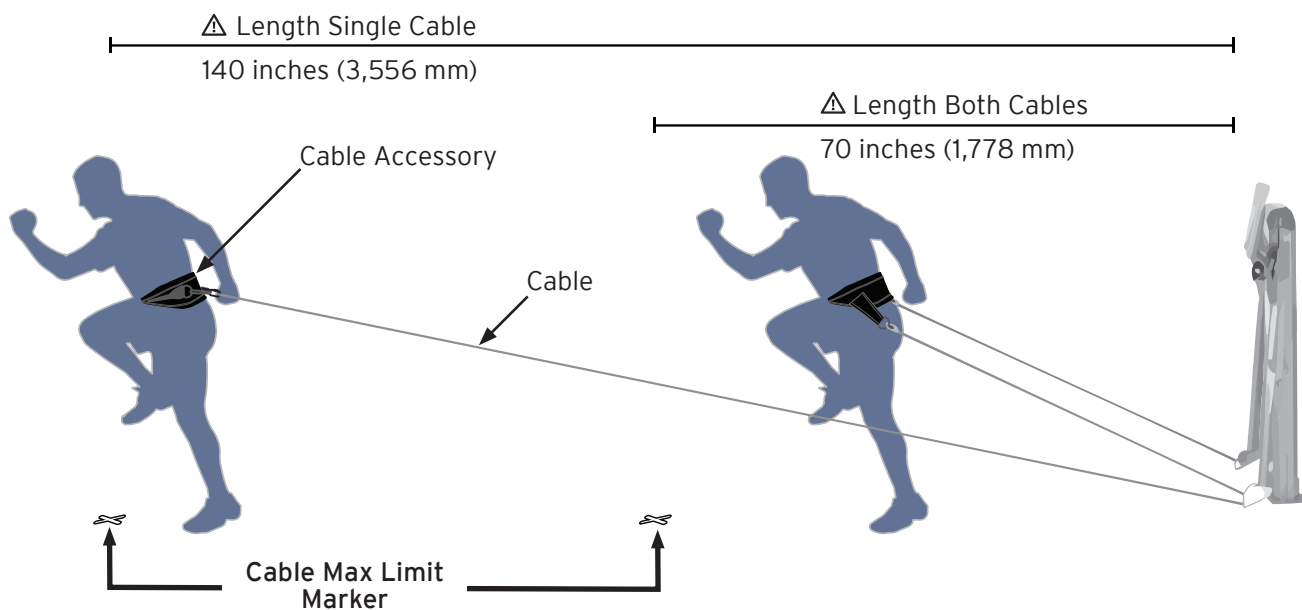


Figure 2. Maximum Cable Length Extension Illustration

**⚠ WARNING: AVOID SERIOUS INJURY OR PROPERTY DAMAGE.** Do not attempt to extend the Cable beyond the Cable Max Limit. Failure to follow this warning will cause the Cable to hit a hard stop, creating a sudden dynamic load that may result in serious injury or equipment and property damage.

**SECURING THE FUNCTIONAL TRAINER**

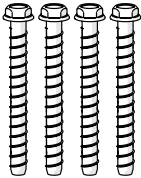
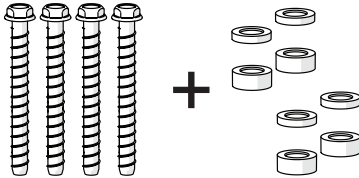
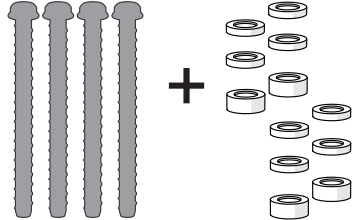
Professional installation required. It is the responsibility of the facility owner to adhere to local and regional building codes.

**INSTALLATION OPTIONS**

- **Keiser Professional Installation Service.** A trained technician from Keiser's installation network will perform the installation.
- **Choose Your Own Professional Installation Service.** Keiser Installation Instructions provide detailed instructions on how to install the equipment into solid concrete, along with information on the proper tools and anchors required.

**MOUNTING REQUIREMENTS****CONCRETE AND FLOORING**

- Equipment installation must be on solid, level concrete surface, minimum 5" (127 mm) thick.
- Minimum concrete compressive strength: 3,000 psi (20.7 MPa).
- New concrete must be fully cured before equipment installation.
- Flooring (i.e. rubber/carpet/artificial turf, including underlayment) over 5/8" (16 mm) thick will require an appropriate anchor length (refer to the Anchor Selection Guide below).

| <b>ANCHOR SELECTION GUIDE</b>  |  |   |
|--|--|---|
| No Flooring<br>(concrete)  | Flooring<br>up to 5/8" (16 mm) thick   | Flooring<br>over 5/8" (16 mm) thick   |
| <p>3/8" x 4"<br/>Concrete Screw Anchors<br/>(supplied)</p>  <p>Embedment depth: 3-5/8" (92 mm)</p>              | <p>3/8" x 4"<br/>Concrete Screw Anchors<br/>and Spacers (supplied)</p>  <p>Embedment depth: 3" (76 mm)</p> | <p>3/8" dia. anchor with appropriate<br/>length (not supplied)<br/>and Spacers (supplied)</p>  <p>Min. embedment required: 3" (76 mm)</p> <p>Factor in 3/8" (9.5 mm) Floor Mount<br/>Plate and flooring thickness when<br/>selecting the appropriate screw<br/>anchor.</p> |
| <ul style="list-style-type: none"> <li>• Anchors must have minimum embedment depth in concrete as specified by the manufacturer.</li> <li>• Minimum hole depth overdrill: 1/2" (13 mm).</li> </ul> |  |   |

**ANCHORING**

- Equipment must be installed with the Floor Mount Plate.
- Use all four anchor holes on the Floor Mount Plate to secure the equipment.
- Follow all safety and installation instructions of the anchor and adhesive manufacturers.
- Do not reuse anchors. Anchors are designed for one-time use only.
- Adhesive application required (supplied).

## INSTALLATION

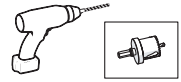
## TOOLS AND MATERIALS



Safety Glasses

High-Quality Floor/Wall  
Scanner (recommended)

Tape Measure

Hammer Drill  
with Dust Collection System  
3/8x6-in. Masonry BitDrill with 1-inch Hole Saw  
(recommended for  
covered floors)

Wire Tube Brush



HEPA Vacuum

3/8 in.  
Socket and Ratchet9/16 in.  
Socket and RatchetTorque Wrench  
9/16 in. Socket

## UNPACKING

Remove the four bolts that fasten the Functional Trainer to the shipping pallet using a 3/8 in. Socket and Ratchet.



**HEAVY EQUIPMENT:** The Floor-mounted Functional Trainer weighs 118 lbs (54 kg). Help is required when handling the Functional Trainer to prevent potential muscle strain and/or back injury.



**CRUSH HAZARD:** Keep feet clear when sliding the Functional Trainer off the pallet.



**IMPORTANT:** Ensure that the mount area has been planned according to the training space required (refer to the "Training Space" section, page 4).

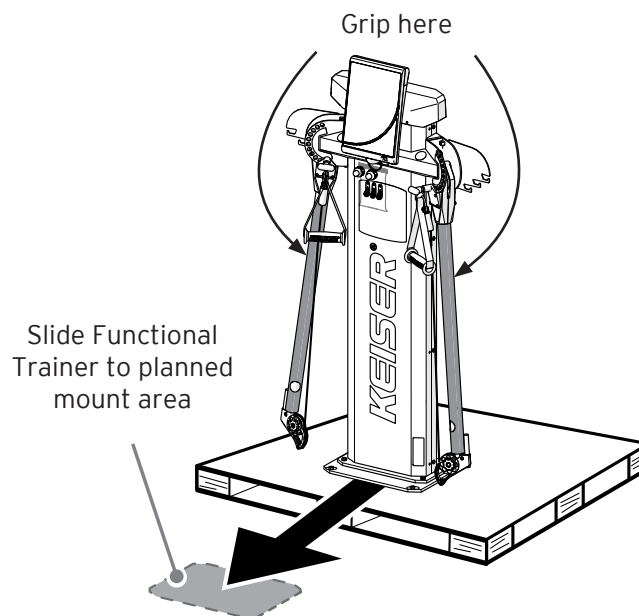
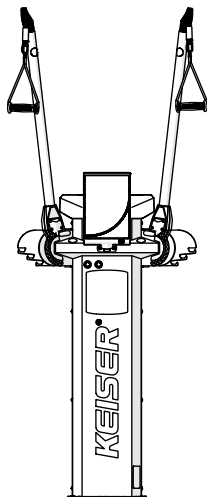


Figure 3. Unpacking the Functional Trainer

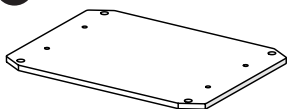
Note: Functional Trainers shipped outside the continental United States may not have the Floor Mount Base Plate pre-installed. See Parts List for a listing of all Floor Mount Base items.

**PARTS LIST**
**FUNCTIONAL TRAINER**


3020XX Functional Trainer


 eChip  
990812 (Qty 3)

 Operation Manual  
305523 (Qty 1)

**FLOOR MOUNT PLATE KIT (PART NUMBER 3021X )**
**1**

**2**

**3**

**4**

**5**

**6**

**7**

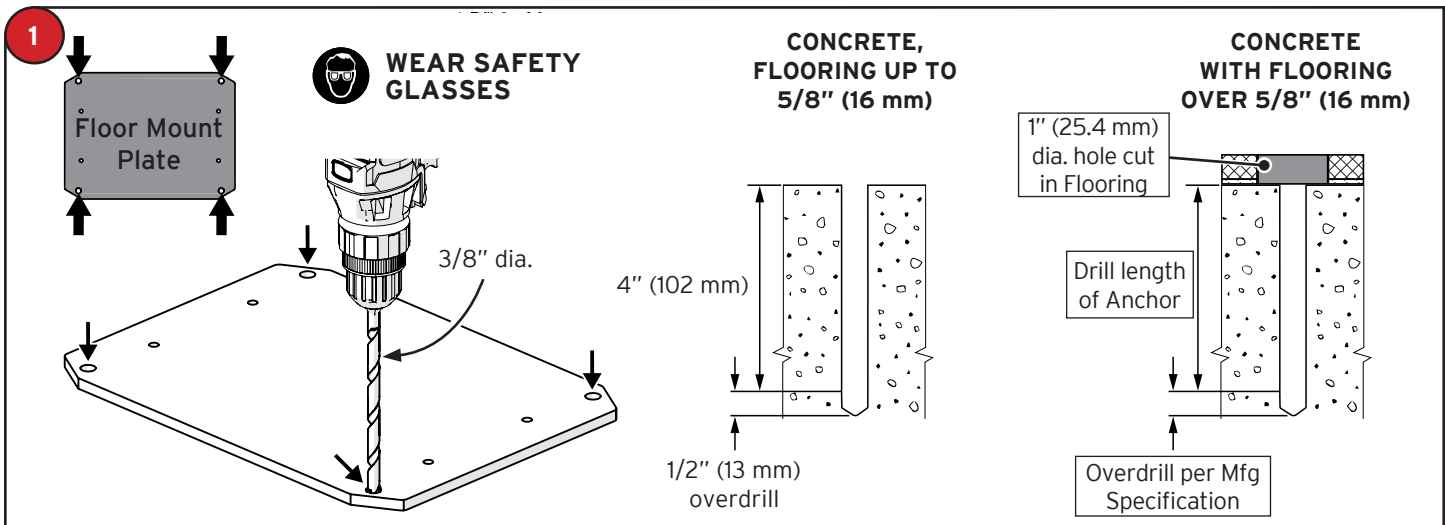
**8**

**9**


|          | Description                             | Qty | Keiser Part Number   |
|----------|---|-----|----------------------|
| <b>1</b> | Floor Mount Plate                       | 1   | 301892               |
| <b>2</b> | Acrylic Adhesive                        | 1   | 305429               |
| <b>3</b> | Concrete Screw Anchor (3/8 x 4 in.)     | 4   | 9334                 |
| <b>4</b> | Spacer (1 in. OD x 1/8 in.)             | 16  | 991703               |
| <b>5</b> | Spacer (1 in. OD x 1/4 in.)             | 16  | 991824               |
| <b>6</b> | Washer (3/8 in.)                        | 4   | 9355                 |
| <b>7</b> | Screw (3/8-16 x 3/4 in.)                | 4   | 9200                 |
| <b>8</b> | Air Tube with Luer and Quick Disconnect | 1   | 953108, 8086, 110897 |
| <b>9</b> | Installation Instructions               | 1   | 305520               |

Check for any damage or missing parts. If parts are damaged or missing, contact your local dealer, distributor, or Keiser Customer Support (see back cover for contact information).

## STEP-BY-STEP INSTALLATION GUIDE



*NOTE: Floor Mount Plate Kit installation procedure shown. Pre-assembled Functional Trainer installation is similar.*

**DRILL USING THE FLOOR MOUNT PLATE AS THE DRILL PATTERN (QUANTITY 4 DRILL HOLES)**

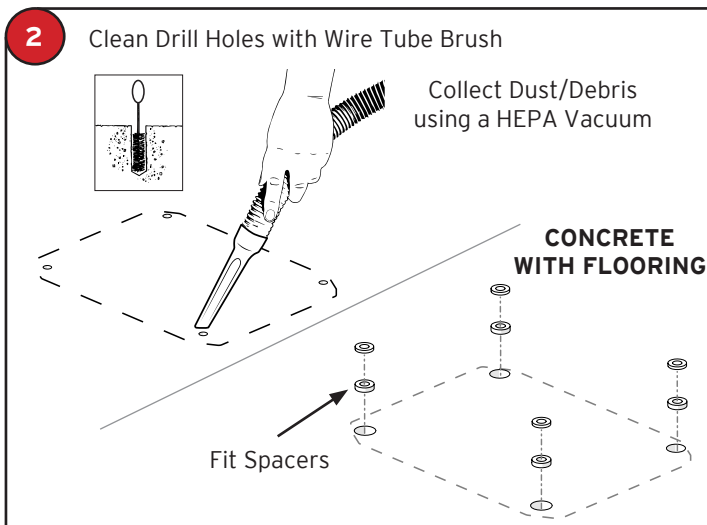
**❗ IMPORTANT:** Check the Floor Mount Plate alignment as each hole is drilled to avoid costly rework.

**CONCRETE OR CONCRETE WITH FLOORING UP TO 5/8" (16 mm)**

- Drill the length of the screw anchor, including overdrill, into the concrete:  
4" (102 mm) anchor screw + 1/2" (13 mm) overdrill depth = 4-1/2" (115 mm)

**CONCRETE WITH FLOORING OVER 5/8" (16 mm)**

- Flooring over 5/8" (16 mm) thick requires a 3/8" diameter anchor with appropriate length (not supplied).
- Drill the length of the anchor, including overdrill, into the concrete, as specified by the manufacturer.
- Cut a 1-inch diameter hole into the flooring material, centered over each drill hole. This is to clear flooring material for spacers to be installed later in Step 2.



**PREPARE DRILL HOLES FOR ADHESIVE**

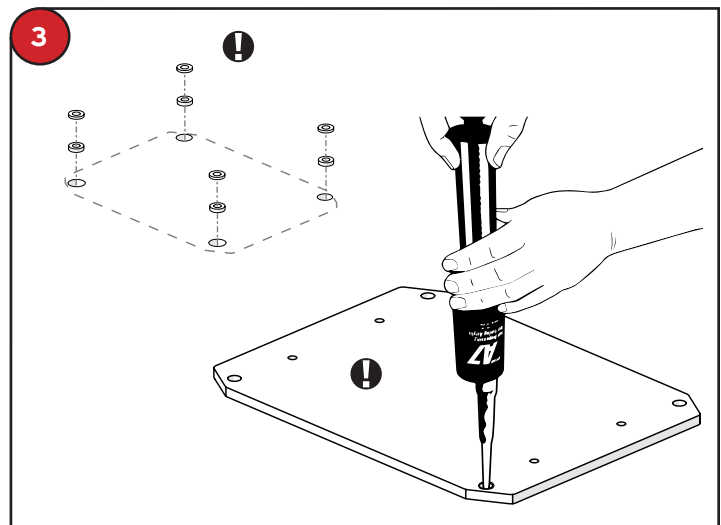
- Clean drill holes with a Wire Tube Brush.
- Collect dust/debris using a HEPA Vacuum.

**CONCRETE WITH FLOORING ONLY**

- Fit each 1" (25.4 mm) diameter hole cut with Spacers (supplied) to match flooring height.

*NOTE: Multiple Spacers in each hole is OK.*

*Example: 3/8" flooring height requires 1/4" and 1/8" Spacers per hole.*



**ADHESIVE APPLICATION**

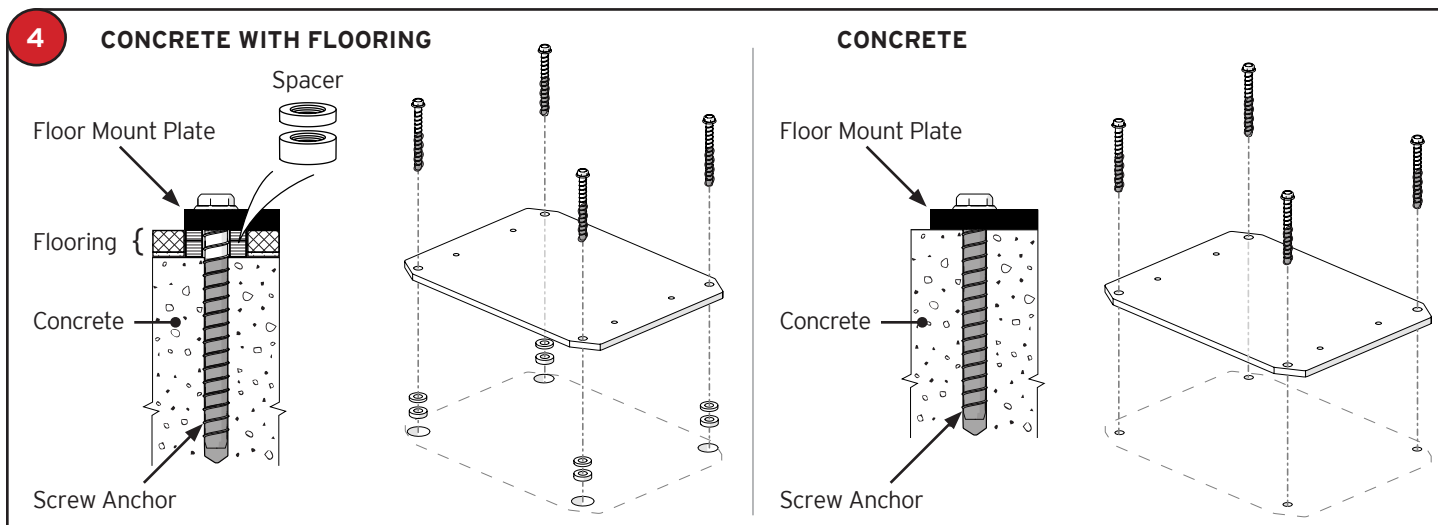
- Set the Floor Mount Plate aligned with the drill holes.

**❗ IMPORTANT:** Installation over Flooring – check Spacers do not interfere with Floor Mount Plate seating. If any gaps are present, fit the holes with the appropriate size Spacers.

- Follow the Adhesive Manufacturer's application instructions.

**❗ IMPORTANT:** Adhesive is fast-curing with very short working time. The next step (Step 4) must be performed immediately after the Adhesive is applied.

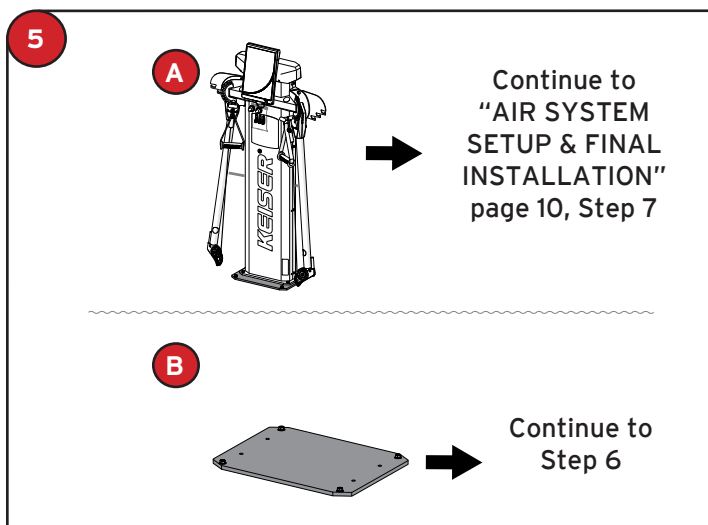


**STEP-BY-STEP INSTALLATION GUIDE**

**INSTALL FLOOR MOUNT PLATE (QUANTITY 4 CONCRETE SCREWS)**

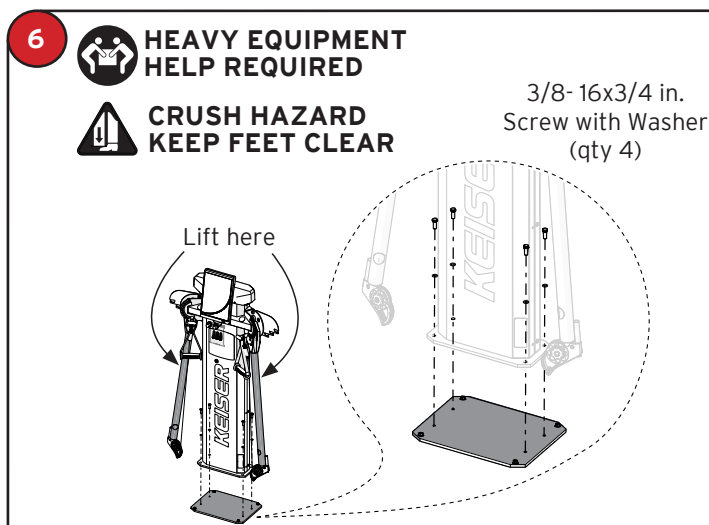
- Recommended: Apply adhesive directly onto Screw Anchor leading threads.
- Insert the Screw Anchor through the Floor Mount Plate and into the drill holes.
- Tighten the Screw Anchors into the concrete until the hex-washer head contacts the surface of the Floor Mount Plate.
- Immediately remove any adhesive spill using a clean cloth.

**CONCRETE WITH FLOORING OVER 5/8" (16 mm)**

- Use 3/8" dia. anchor with appropriate length (not supplied) and Spacers (supplied).
- Anchor minimum embedment required: 3" (76 mm).
- Follow anchor manufacturer's instructions for tightening the anchor, including torque specifications.


**FINAL INSTALLATION / SETUP**

- A** For pre-assembled Functional Trainer, continue to "AIR SYSTEM SETUP & FINAL INSTALLATION" page 10, Step 7.
- B** For a Functional Trainer unit that requires assembly, continue to Step 6.

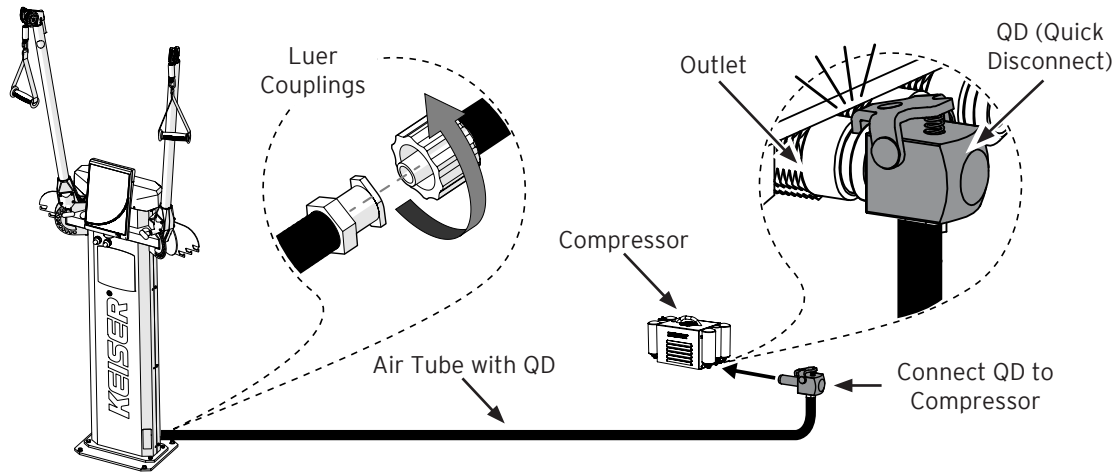

**FUNCTIONAL TRAINER INSTALLATION**

- With your helper, place the Functional Trainer onto the Floor Mount Plate, align mount holes as shown.
- Start a Screw with Washer into a threaded hole (qty 4).
- Fasten all four Screws using a 9/16 inch Socket and Ratchet.
- Torque all four Screws to 25-30 ft-lbs (34-41 Nm) using a Torque Wrench and 9/16 inch Socket.

Continue to Step 7 "AIR SYSTEM SETUP & FINAL INSTALLATION" on the next page.

## AIR SYSTEM SETUP &amp; FINAL INSTALLATION

7

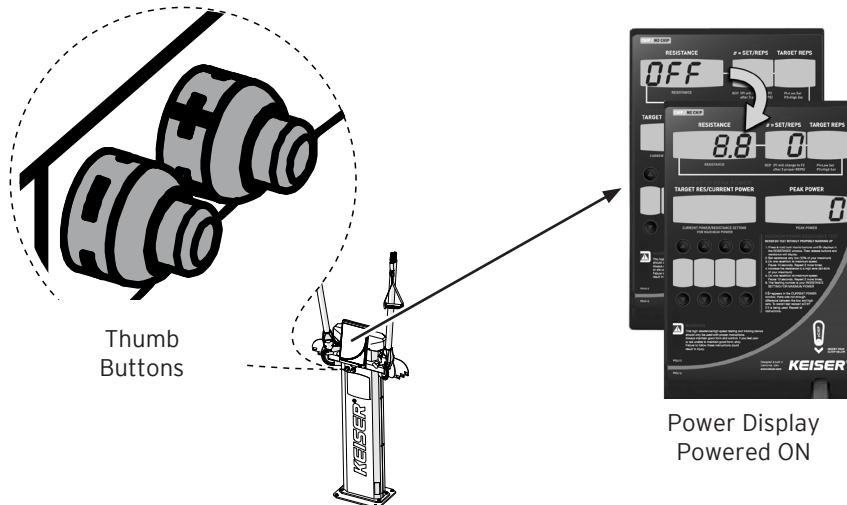


REFER TO THE DIAGRAM ABOVE FOR AIR SYSTEM SETUP AND FOLLOW THE INSTRUCTIONS BELOW

**⚠ WARNING:** Never connect Keiser pneumatic equipment to an air source that is capable of exceeding 120 psi / 8.27 bar. Over pressurizing Keiser pneumatic equipment may cause tubing to burst, breakage of equipment, abnormal operation, or serious injury. Use only clean, dry, regulated compressed air at the rated pressure range of 100-120 psi / 6.89-8.27 bar.

1. Connect the Male-Female Luer Couplings, then the Quick Disconnect (QD) into the Compressor (Compressor not included, sold separately). Ensure that the QD clicks into position.
2. Plug the Compressor into a power source to power the Compressor ON. Allow the Compressor to build up to a minimum of 100 psi / 6.89 bar.

8

**POWER ON THE EQUIPMENT**

Press the "+" and then the "-" Thumb Buttons a few times to ensure air cycles through and that the Power Display powers ON.

NOTE: Keiser Air Compressor manuals are available for viewing and download at [keiser.com/support](http://keiser.com/support) (search: Air Compressor manuals).


**BEFORE YOU USE THE FUNCTIONAL TRAINER**

⚠ **WARNING: Avoid potential injury and/or property damage.** Ensure the Floor Mount Plate is securely fastened to the concrete floor. If movement is found, check all Screw Anchors and Mount Screws and ensure that they are all firmly fastened before use.

1. Make sure the Functional Trainer has been installed according to the instructions.
2. Ensure that the Functional Trainer is connected to the Compressor/Air Supply and that the Compressor/Air Supply is powered ON.
3. Read the Operation Manual, enclosed with the equipment and available at [keiser.com/support](http://keiser.com/support) (search: Functional Trainer Manual).
4. Store Installation Instructions for future reference.

**CUSTOMER SUPPORT**

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