

# SteelPac<sup>TM</sup>

## Adjustable Dumbbell User Manual

Please read this manual in its entirety before using the product

## Introduction

Congratulations on your purchase of a SteelPac dumbbell! SteelPac's durable, compact, solid dumbbells allow you to make the most of your workout without the need for an entire rack of dumbbells. We at SteelPac appreciate your business; we realize there are many other options for you to have spent your fitness dollars on, and will do our best to ensure we exceed your expectations in both product performance and customer service. If you have any questions or concerns regarding your SteelPac product, email us at [support@steelpac.ca](mailto:support@steelpac.ca), or call us at 1-306-270-3737.

In order to utilize your SteelPac dumbbell to the fullest extent, it is necessary that you read and fully understand this owner's manual. To facilitate understanding, Figure 1 defines the components that comprise your SteelPac dumbbell.

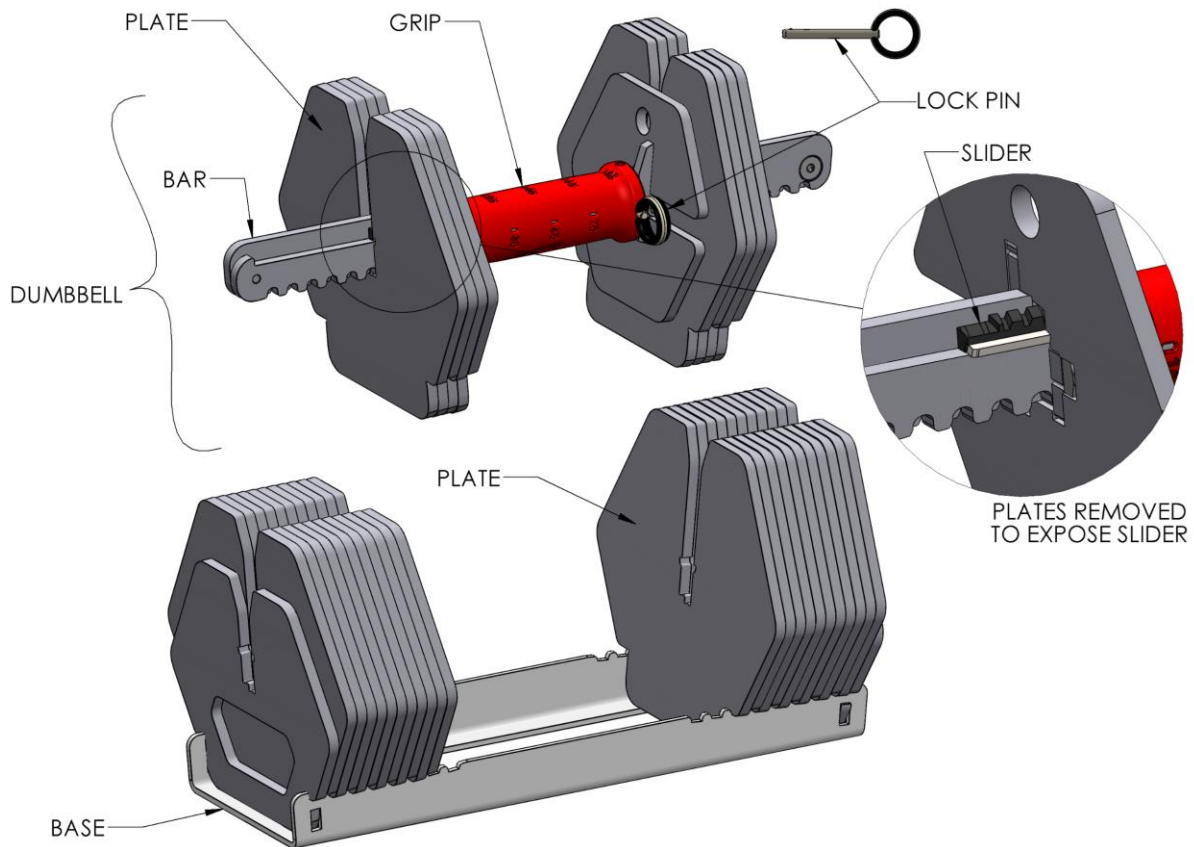


Figure 1: Components of the SteelPac dumbbell.

## Safety

Ensure all users of the SteelPac dumbbell understand and follow all instructions in this manual prior to using the dumbbell. Failure to do so may result in personal injury or loss of life to the user or bystanders.

1. Inspect dumbbells prior to each use. Do not use a dumbbell with worn, damaged, or loose parts, fasteners, or hardware.
2. DO NOT USE THE DUMBBELL if either of the following conditions exist:
  - a. The tip of a slider is cracked, split, chipped, dented, or damaged in any way that may compromise its ability to lock a plate to the bar. Contact SteelPac for support.
  - b. When removing the dumbbell from the base, a slider is not positioned as shown in Figure 2 a), or any plate is not locked to the bar by the slider as shown in Figure 2 b). Refer to the section titled “Troubleshooting - Plates sticking to bar”.

Continued use may result in a plate falling off the dumbbell unexpectedly, potentially causing severe injury or property damage.

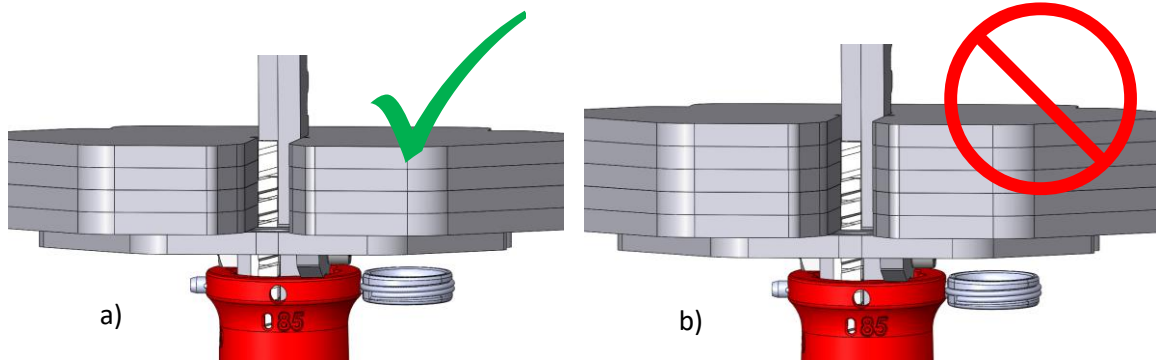


Figure 2: a) All plates are locked to the bar by the slider.  
b) An extra plate not locked to the bar by the slider remains on the bar.

3. Before beginning any exercise program, consult a physician or health care professional. Only such personnel are qualified to determine the exercise program that is appropriate for your particular age and physical condition. If you experience any light-headedness, dizziness, or shortness of breath while exercising, stop the exercise immediately and consult a physician.
4. The harsh edges of the dumbbell have the potential to cause serious injury if appropriate care is not taken. Do not allow any part of dumbbells to impact yourself or others. Avoid motions that could result in either end of the bar, or edges of the plates, impacting yourself or others.
5. Always exercise care when using any exercise equipment. Maintain awareness of nearby people and surroundings. Do not allow the dumbbell to strike yourself, bystanders, or property.
6. Keep fingers and toes clear of pinch points when setting dumbbell into stand.
7. Never allow children to use or play near this equipment. Anyone under the age of 18 must always have parental supervision and instruction regarding the use of this product.
8. Do not allow a dumbbell to drop freely to the ground, or subject it to sharp impact including striking against another dumbbell as personal injury or property damage may occur.
9. Always place the base on a stable level surface capable of supporting the full weight of the set.

10. Do not leave the base in a location where it is at risk of being tipped over, kicked, or jostled.  
When the dumbbell is removed from the base, plates left in the base are not locked to the base and could fall out or tip over if the base is jostled or tilted.
11. SteelPac products are not intended to be user-serviced. Do not attempt to repair or disassemble a SteelPac dumbbell. Contact SteelPac Ltd. for service.
12. This product is intended for home use only; it is not intended or warranted for commercial application. Visit [steelpac.ca](http://steelpac.ca) to find commercial-warrantied products.

## Care and Maintenance

### General

- Avoid slamming dumbbell down into the base. Such impacts may cause critical edges of the plates and bar to deform, which may cause unlocked plates to stick to the bar, creating risk for a plate to fall off unexpectedly causing severe injury or property damage.
- While SteelPac dumbbells are exceptionally durable, dropping them is not recommended, especially not on hard floors. Damage due to dropping is not covered by warranty.
- Keep the set clean at all times. It is especially important to keep the plates free of any substance that may cause them to stick together, which may cause unlocked plates to remain on the bar, creating risk for a plate to fall off unexpectedly causing severe injury or property damage. Abrasive matter introduced into the bar may cause excess wear on the grip and the weight selection mechanism.
- Do not use if plates are bent, have mushroomed edges, or any other defect that causes them to rub excessively between each-other, as this may cause unlocked plates to remain stuck on the bar, creating risk for a plate to fall off unexpectedly causing severe injury or property damage.
- Do not attempt to rotate the grip if it does not rotate easily, as this could result in damage to the grip. Refer to “Troubleshooting”.
- Do not store the dumbbell in a location where it will be exposed to:
  - Daily direct sunlight as this may fade the color of the grip or result in elevated temperatures,
  - Temperatures above 60°C as this may cause plastic components to warp,
  - High humidity or direct moisture.
- Avoid moving the dumbbell from storage in a cold environment to a warm environment. A cold dumbbell moved into a warmer environment may attract condensation.

### Finish

The steel components of your SteelPac dumbbell are protected from corrosion by a sealant<sup>1</sup>. A black oxide<sup>2</sup> surface treatment facilitates adhesion of the sealant. Black oxide, also known as “bluing” is the surface treatment traditionally used on firearms. By nature, the black oxide layer is very thin (less than one thousandth of an inch), hard, and chemically bonded to the steel, making it durable and abrasion resistant. Black oxide is porous, meaning it provides minimal corrosion protection on its own, but the porosity allows a sealant such as oil or wax to soak in enabling long-term durable corrosion protection.

Care must be taken to maximize life and effectiveness of the sealant and black oxide.

- Avoid contact with abrasive surfaces such as concrete.
- Avoid frequent rubbing with hard surfaces.
- Do not leave the dumbbell in an environment where it may get hotter than 60°C, as this may cause the sealant to evaporate over time.

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<sup>1</sup> Dumbbells sold prior to September 2020 did not have sealant or black oxide treatment applied.

<sup>2</sup> Dumbbells sold prior to (TBD) did not have black oxide surface treatment applied.

- Keep the dumbbells clean and dry.

The black oxide layer cannot be easily restored if it is worn off: restoring it requires complete disassembly and running parts through the complete black oxide process. However, techniques exist for 'touching up' a black oxide surface; any such techniques are applied at the discretion of the owner.

The sealant can be maintained or restored by periodic re-application. SteelPac recommends applying a petroleum solvent-based wax or oil finish to ensure compatibility with the original finish and minimal thickness build-up. Petroleum jelly and wax are effective. Do not use acrylic, urethane, or epoxy-based, or other types of sealant, as they add thickness to the plates (which may cause unlocked plates to stick to the bar), and may peel or flake-off over time. After applying sealant, be sure to wipe parts clean of any excess residue, especially between plates. Residue may cause unlocked plates to remain stuck to locked plates, creating risk for a plate to fall off unexpectedly causing severe injury or property damage.

## Instructions

### Adjusting the Weight

The current weight setting of your SteelPac dumbbell is indicated by the number labels and holes integrated into the hand grip. Each number represents a weight in pounds. Next to each number is a hole. For each weight setting, the edge of the white slider can be seen through one of these holes. The adjacent number label indicates the current weight setting in pounds.

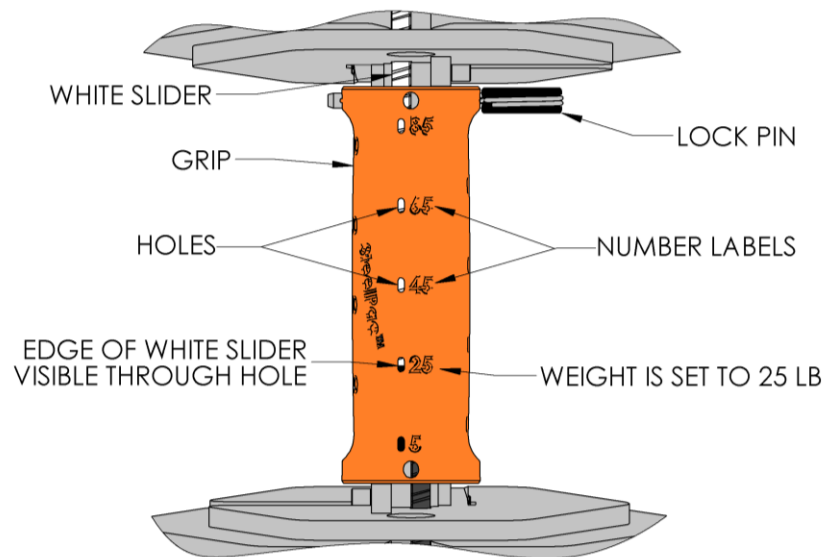


Figure 3: Weight indication, as viewed from above dumbbell.

To adjust the weight setting:

1. Remove the lock pin.
2. Rotate the hand grip in quarter-turn increments until the desired weight is reached. DO NOT attempt to rotate the grip if it does not rotate easily, as this could result in damage to the grip. If the grip does not rotate easily, check to ensure that the bar is properly seated in the base (see Figure 4), confirm that you're not trying to turn past the minimum or maximum weight setting, and confirm that the lock pin has been removed. Refer to "Troubleshooting" if this does not resolve the problem.
3. Ensure the grip is rotated to the proper position such that the lock pin holes on the grip are aligned with the lock pin holes through the steel body of the bar.
4. Re-insert the lock pin through any of the four lock pin holes, as shown below.

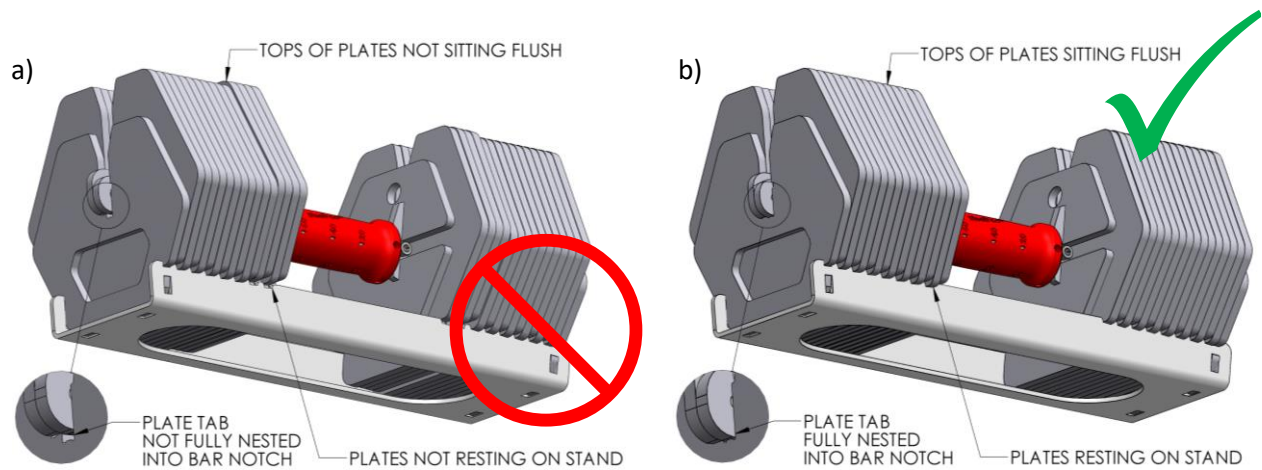


Figure 4: a) Dumbbell not properly seated in stand, b) dumbbell properly seated in stand.

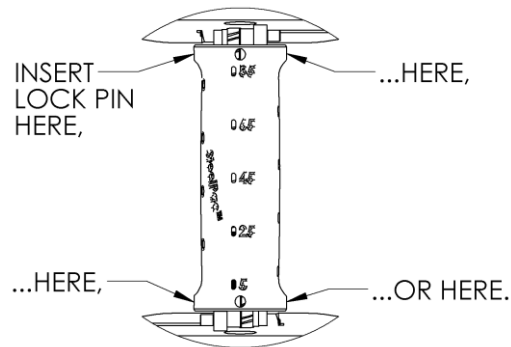


Figure 5: Locations for inserting lock pin.

## Using the dumbbell

1. Ensure the dumbbell is properly seated in the base, and the base is on a sturdy, stable, level surface.
2. Set the weight as described in the previous section, titled “Adjusting the Weight”.
3. Ensure the lock pin is fully and securely inserted in the lock pin hole.
4. Firmly grip the hand grip and lift the dumbbell out of the base.
5. Check to ensure each plate is locked to the bar by a slider. Refer to the “Safety” section and Figure 2.
6. Perform your exercise, following the precautions detailed in the “Safety” section. It is not necessary to return the dumbbell to the base between unless a weight change is desired. CAUTION: While the dumbbell is removed from the base DO NOT remove the lock pin or attempt to add/remove plates.



- Return the dumbbell to the base when you are ready to change the weight setting; refer to the section titled “Adjusting the Weight”. Note: the two ends of the dumbbell are identical, so the dumbbell can be returned to the base with the ends reversed.

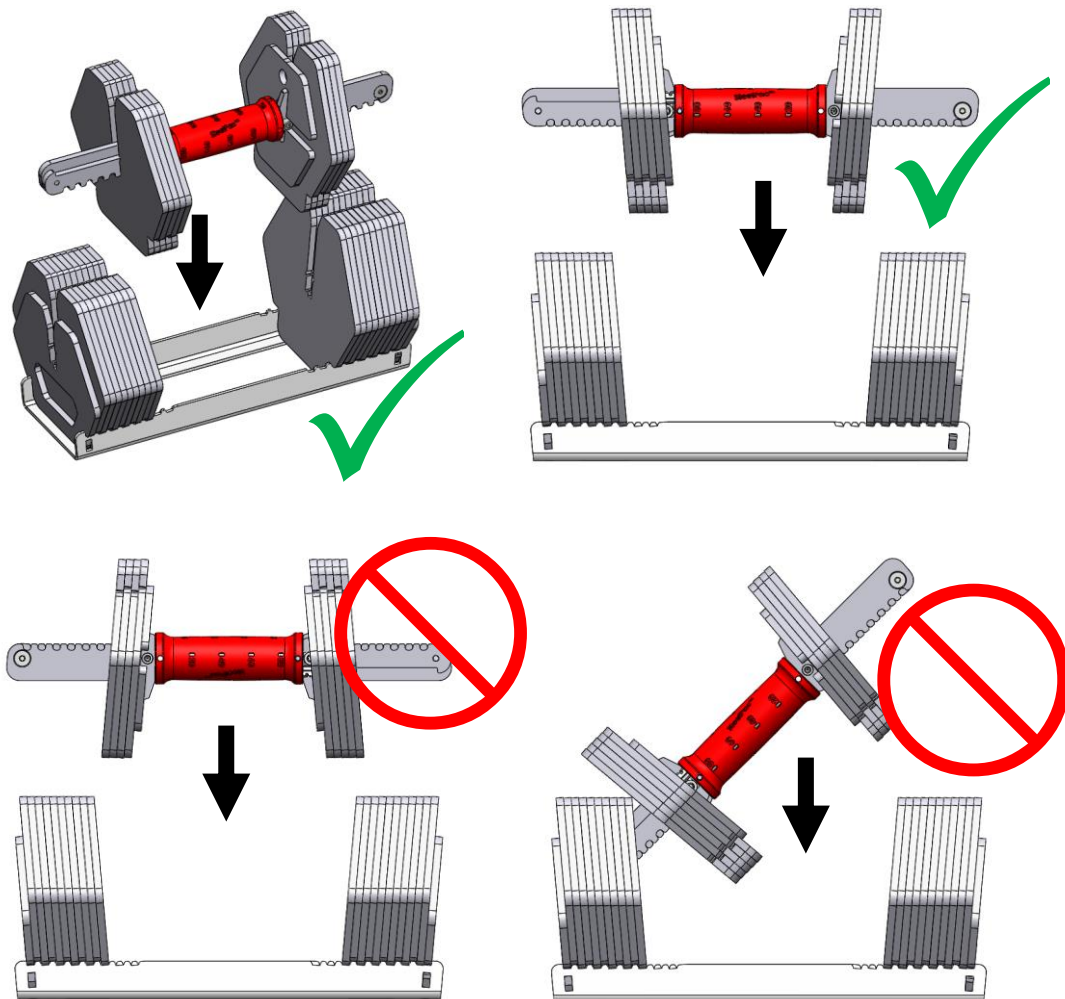


Figure 6: Proper and improper orientations for inserting dumbbell into base.

## Transportation

The safest and most convenient way to transport a SteelPac dumbbell is simply to place the dumbbell in its base and set it to its highest weight setting. This will ensure all components are locked together, allowing the set to be handled as a single unit that will not fall apart. **DO NOT** attempt to carry a complete dumbbell set (dumbbell plus base) if it is not set to its highest weight setting. Always ensure the lock pin is securely inserted.

When transporting the dumbbell in a vehicle, ensure it is restrained such that it is unable to roll, and set to its maximum weight setting. Severe personal injury or damage to the vehicle could result from a dumbbell falling apart or rolling freely during braking, acceleration, or turning.

## Assembly

The SteelPac dumbbell comes from the factory fully assembled; however, it is possible for the plates to be knocked out of place from the base. If this has happened, follow the instructions listed below.

1. Set the empty base on a level surface.
2. Set a plate into the base, ensuring it is in full contact with, and aligned with, the stand's endplate. If the plate does not sit straight in the base, flip it so that its opposite face is in contact with the stand endplate. From one plate to the next, the notches in the bottom of the slot should alternate sides.
3. Set another plate into the base, ensuring it is in full contact with, and aligned with, the previous plate. If the plate does not sit straight in the base, flip it so that its opposite face is in contact with the previous plate. From one plate to the next, the notches in the bottom of the slot should alternate sides. Note: all plates are identical; it is not necessary to place the plates in any particular order.
4. Repeat steps 2 and 3 for all plates until the base is filled on both ends. Ensure the same number of plates are on each end of the base.
5. Remove the lock pin from the bar and, while holding the bar, twist the grip to fully retract the sliders.
6. Set the bar into the base.
7. Set the desired weight; your dumbbell is now ready to use again.

## Troubleshooting

### Plates sticking to bar

Gently lower the dumbbell to the floor and turn it upside-down (i.e. with the 'teeth' facing up); remove the errant plate(s); and inspect the plate(s), bar, and slider for damage, foreign material, sticky substances, bent condition, etc.

If any edges of the plates or bar appear to have been deformed, a metal file may be used to removed steel that may have mushroomed due to impact or improper use.

Check that the sliders move to the appropriate position when the weight is set. When the dumbbell is in proper working order, the ends of the sliders should be positioned as shown in FIGURE X. If this is not the case, the sliders or the internal threads of the hand grip may be damaged. To assess:

### Dumbbell not fully seating down into the base

If the dumbbell does not drop into the base properly (see Figure 4), check the following:

- The base endplates may be leaning outward too far, preventing the tabs on the plates from nesting into the notches on the bar. Contact SteelPac for solutions.
- One or both of the hexagon plates on the bar may pushed outward slightly. Gently tap them back into place with a wooden block or rubber mallet.
- Sliders are not fully retracted. This may be due to a damaged grip or sliders. If so, contact SteelPac for service.

## Grip does not rotate easily

If the grip does not rotate easily, check the following:

- Ensure that the bar is properly seated in the base (see Figure 4).
- Confirm that you're not trying to turn past the minimum or maximum weight setting.
- Confirm that the lock pin has been removed.

Contact SteelPac if these do not resolve the problem.

## Corrosion

If your SteelPac dumbbells are developing rust spots, the sealant likely needs a touch-up. While taking care to not remove the black oxide surface, remove rust by rubbing with an abrasive pad. See the section titled "Finish" for instructions for reapplying the sealant.