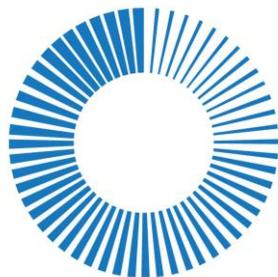
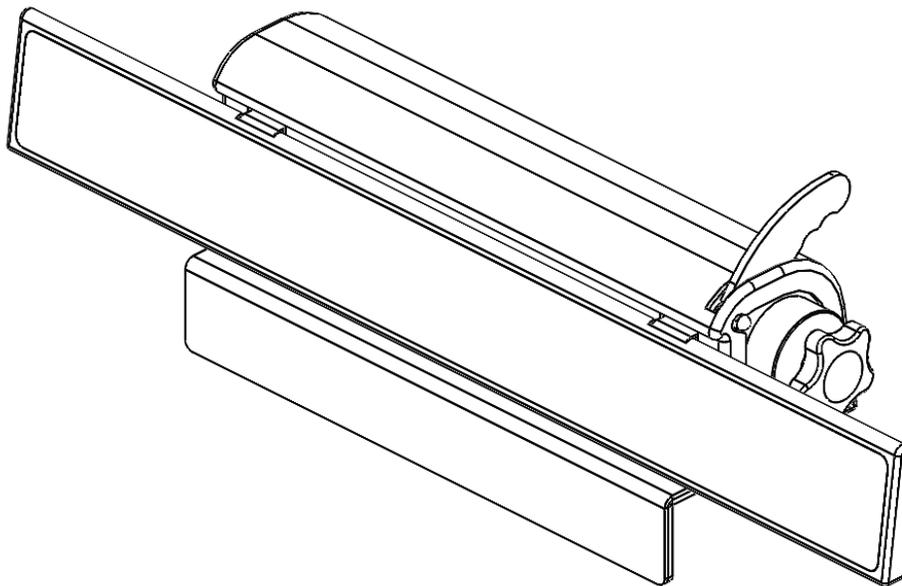


BACKSTROKE START DEVICE



**Colorado
TIME SYSTEMS**

A **PLAYCORE** Company

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F1024 Rev 201604

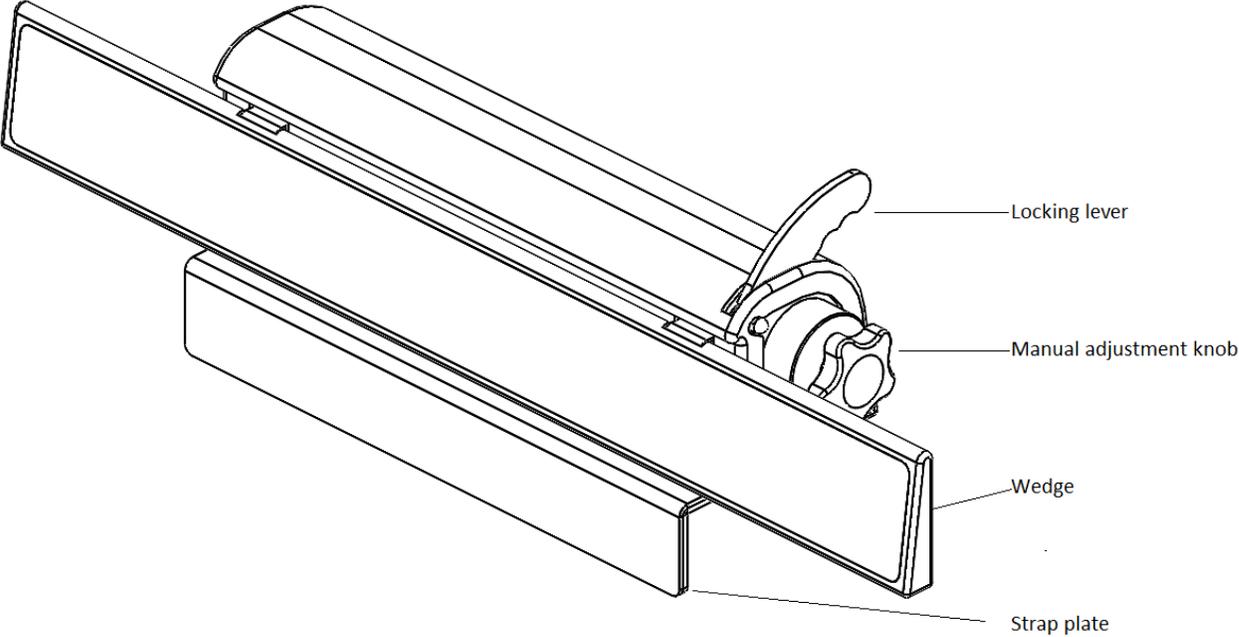
You have purchased a Colorado Time Systems Backstroke Start Device. Providing the unit is installed correctly and properly maintained, it will furnish you with many years of trouble free use. It is important to read this entire manual prior to beginning installation or operation.

Shipping Information:

Each unit will arrive fully assembled as ordered in one box. Before accepting the package from the carrier, inspect for visible damage. Colorado Time Systems is not responsible for lost or damaged freight.

Information in this manual is subject to change without notice. Pictures and illustrations may not accurately depict your version. Please check our website for the most current information; our user manuals are available online in the customer service section of our website.

Components and Hardware

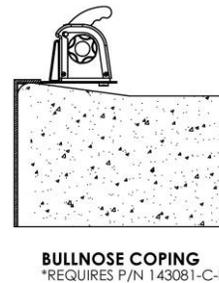
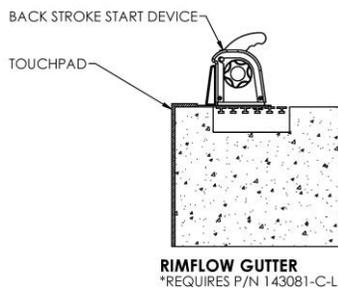


Installation Overview

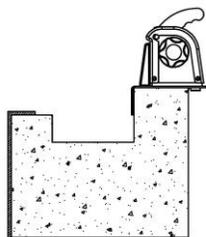
Your new Backstroke Starting Device may be installed using any of the approved attachment methods provided by Colorado Time Systems. Unless a deck mounting option is selected, each unit is shipped with a strap attachment.

If you have not already done so, determine the correct attachment method for your pool and gutter style.

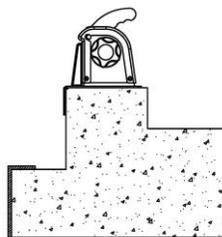
For bull nose, rimflow and similar gutters, use strap and long (9.25") bracket (P/N 143060-L). Note that this bracket shortens the pool by 0.103 inch.



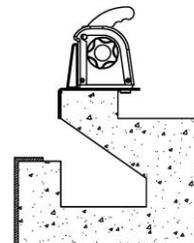
For trough, haunch and recessed gutters, use strap and short (5.75") bracket (P/N 143060).



TROUGH GUTTER



HAUNCH GUTTER



RECESSED GUTTER

In all cases, the installation must meet these conditions:

- Device should be centered between the starting block handles..
- Device position must not pose a risk to swimmers.
- Device must be located so that it fully retracts out of the water and off of the touchpad.

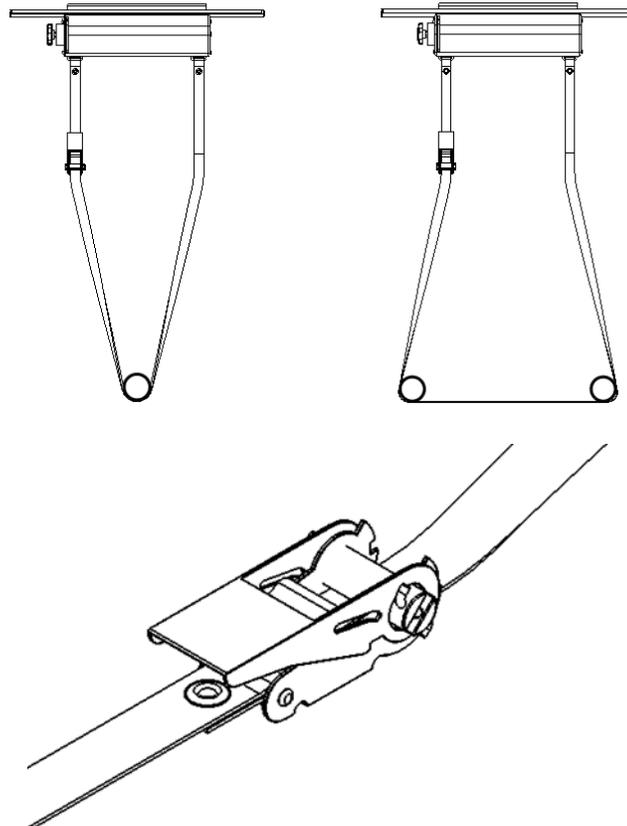
Strapped Installation

To install your Backstroke Starting Device, first check your deck compatibility for strapped installation using the following guidelines:

- Strapped installation is designed to accommodate a single or dual post starting platform with a setback up to 36".
- Device straps should be routed beneath or behind backstroke bars on the starting platform.

Once you have determined that strapped installation is compatible with your deck and block configuration, the device can be attached. If the deck or starting block configuration does not allow for use of the standard strap attachment, please contact Colorado Time Systems for alternate attachment options.

Attachment is completed by routing the straps behind the starting platform anchor posts and through the ratchet as shown below.



Deck Installation

Tools & materials needed:

- Permanent marker
- Drill with 3/8" bit suitable for your deck
- Reamer or vacuum
- 1/4" setting tool (Sup-R Drop 1314700) or punch
- 5/32 Allen wrench
- Two anchors and two screws (shipped with deck mounting plate)

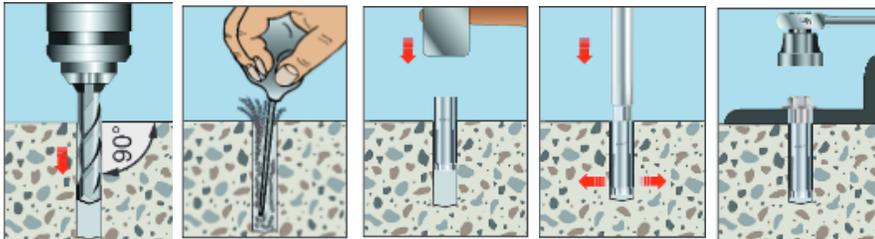
Attach deck mounting plate, if not already attached

If you ordered the backstroke start device and deck mounting plate at the same time, the plate will be attached to the device. If you ordered the deck mounting plate separately:

1. Open the three plastic screw covers on the bottom of the unit
2. Unscrew the three screws with the Allen wrench
3. Remove the mounting plate (either long bracket or short bracket) that came with the strap version
4. Re-use the same screws to attach the deck mounting bracket.

Anchor Installation:

1. Place backstroke start device with mounting plate in desired location on pool deck.
2. Using deck mounting plate as a template, mark the two mounting holes in the deck with the permanent marker.
3. Drill hole same length as anchor. Do not use core bits. Maintain accurate hole size and position.
4. Clean hole of debris with vacuum or reamer.
5. Drop in anchor, slotted end first.
6. To set, drive setting tool into anchor until shoulder of tool is flush with top of anchor.



Backstroke Start Device Installation:

Place start device with deck mounting plate with holes in plate aligned with holes in anchors. Screw screws in with Allen wrench.

Other Approved Installations:

Custom mounts can be fabricated for the Backstroke Start Device. To obtain information on how to order a custom anchoring solution, or starting block integration, please contact your local distributor or Colorado Time Systems Customer Service at 970.667.1000.

Operator's Guide

NOTE: The Backstroke Start Device should always be used in a manner consistent with the regulations set forth by the governing organization for the event.

The Backstroke Start Device is designed so that swimmers of all abilities can operate the device themselves while in the water. The device is very easy to use:

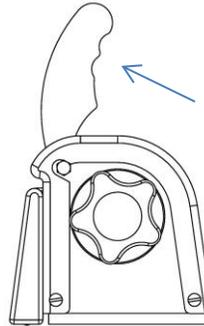
- 1) **Pull and hold lever**
- 2) **Set wedge**
- 3) **Release lever**
- 4) **Start**

This procedure is described in more detail below:

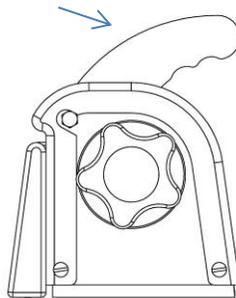
Note: The first swimmer in a meet to use the Backstroke Start Device should submerge the wedge so that the straps are fully extended, wetting the straps. This will help prepare the straps to retract evenly.

Each swimmer performs the following steps:

- Pull locking lever and hold in place.



- Pull out wedge and position at the desired level on the wall. Make sure that the water line is within the red areas (on the straps and wedge) if your ruling body requires that the top of the wedge is within 4 cm above or below the water line.
- Hold wedge in place with feet and release lever; it will fall into locked position.



- Assume ready position and start at start signal.
- Wedge automatically retracts leaving the wall unobstructed for turns and finishes.
- Retracted wedge is ready for next swimmer.

Care and Maintenance

The following should be performed periodically to ensure safe and dependable use.

- Before storing for extended periods:
 - Remove unit from installed location
 - Release locking lever, fully extend wedge on straps to end of travel and lock lever, using a sturdy rubber band to secure in place. Use a weight to keep wedge in place.
 - Rinse entire unit in **fresh** (not pool) water.
 - Allow unit to dry completely while extended. Once fully dry, hold wedge firmly, carefully remove weight and gradually allow wedge to retract.
 - Store in a clean, dry place.
- Remove any discoloration from stainless steel components with a 3M scratch pad (stainless steel components only). Wipe clean with a sponge dampened with Spectra Clean. Repeat these steps several times to passivate the stainless steel. Spectra Clean kits are available from Colorado Time Systems. Do not spray with high-pressure water. Only clean with **fresh** (not pool) water.
- Case and wedge may be cleaned with **fresh** (not pool) water and a mild detergent.
- Inspect unit for damage or loosening connections.



Troubleshooting

Problem:	Cause:	Solution:
Wedge does not retract fully or retracts slowly	Temporary tension problem with spring Worn or damaged spring Wear or damage to shaft/bearings	During a race, wind the wedge back with the manual adjustment knob. If problem persists, contact Colorado Time Systems Customer Service
Wedge does not retract evenly	Uneven strap tension while winding	Pull wedge to end of travel and allow to retract slowly
Start reaction times measured by timer and touchpad seem longer	When the wedge retracts, it bumps the touchpad, making the system think the swimmer hasn't yet departed	Start reaction times measured through the touchpad are not accurate when backstroke start device is used

*Please contact your local distributor or Colorado Time Systems Customer Service to order parts
970.667.1000