

RAPTOR SKY HOOK TD.

Indoor and Outdoor Rock Climbing Prosthetic Accessory

WARNING! Rock climbing, either indoor or outdoor is an extremely hazardous activity that may result in severe injury or death!

TRS makes NO Warranties or Guarantees that using the RAPTOR SKY HOOK is SAFE! Use of the RAPTOR SKY HOOK, might result in severe injury or death!

We highly recommend that you use a high performance prosthesis, capable of supporting your entire body weight, which is designed specifically with this type of activity in mind.

Features: A solid titanium frame with three interchangeable tips, in two durometers of polyurethane rubber (Medium-Black, Hard-Gray) and one solid brass. A stainless steel wrist component adapter with ½ inch x 20 TPI that accepts “quick disconnect” components. A unique, adjustable, friction pivot system providing the climber with different approach and hold options. Replaceable, inexpensive “O” ring high friction surface shields along critical contact areas.

Assembly and Adjustments: Please review the enclosed picture(s) to understand the various components in the RAPTOR SKY HOOK. Included with the Raptor are the main titanium frame assembled with “O” Ring surface shields, the medium hard polyurethane tip (Black) and a harder polyurethane tip (Gray) and a solid (Shapeable) brass tip. The assembly includes a stainless steel wrist adapter, two axle spacer washers, a main axle with two “Ny-lock” style main axle, nuts and two internal nylon “angle limiter” set screws, that are adjustable to allow more or less “tilt” to the SKY HOOK. An accessory pack includes and extra set of nylon limiter set screws, an extra set of stainless steel tip fasteners and an extra main axle nut.

Removing-Changing Tips: Two #8 x 32 TPI stainless steel fasteners are used to install the tips onto the titanium frame with a 3/32 inch Allen Wrench (Included). Always use Blue Locktite ® or equivalent when installing or reinstalling a tip onto the RAPTOR. The fasteners are designed to enter the frame from opposite directions. Install the fasteners carefully so as not to strip out any threads in the titanium frame. Install the fasteners so that they are “flush” to the outside surface of the tip. Three tips are provided to provide the climber with the ability to experiment with the holding and wear characteristics of each. The solid brass tip can be shaped by the climber if so desired. The softer tip will obviously wear out sooner than the harder tip or brass tip. Sets of two tips each in the various materials are available from TRS directly. If the polyurethane is worn off but the internal aluminum tip is not damaged it may be possible to return in the tips for a certain level of credit towards new tips, so that they can be remolded with new materials. After inspection of the parts acceptance of the tips for “retreading” is up to the sole discretion of TRS staff.

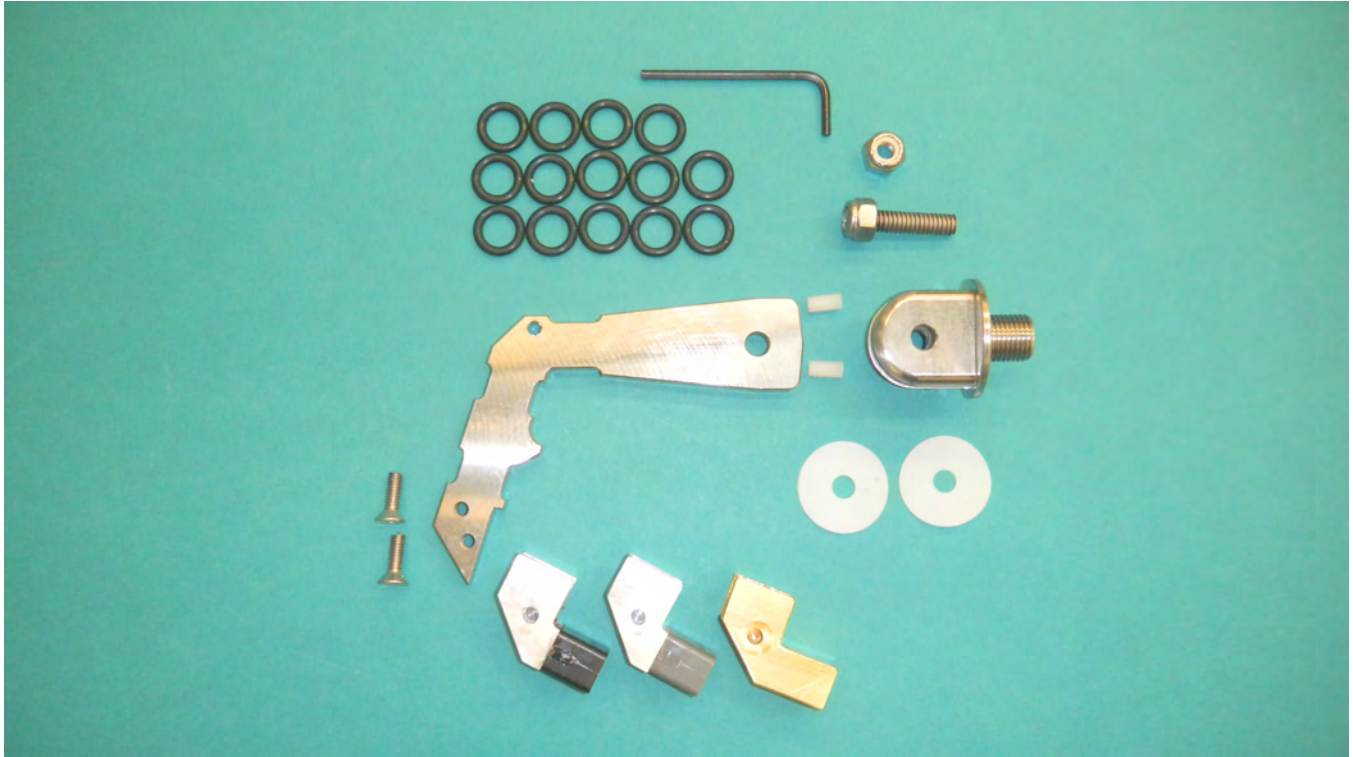
RAPTOR Friction Pivot Adjustment: The two Ny-lock nuts control the tension and friction on the RAPTOR’s pivot system. Tightening the nuts will increase the friction making it more difficult to pivot the unit, up to a point where the unit could be locked down in a particular angle. NOTE! One Nut has the axle marked with a “Set Point” embedded into the axle’s end (See photo). This nut is permanently fixed to the axle and should not be removed. Remove the opposite nut when loosening or disassembling the RAPTOR.

RAPTOR Angle: The Raptor is shipped with the nylon “angle limiter” set screws installed “fully in” allowing for the RAPTOR to have a full range of “Tilt”. To reduce the angle of tilt the set screws can be backed out to adjust and reduce the RAPTOR’s tilt either forward, backward or both. A 3/32 inch Allen Wrench (Included) is used for this operation.

To access the nylon set screws first remove one axle nut (Remove the correct nut.. see Friction Pivot Adjustment above). Slide out the axle and spacer washers and set aside. Using the 3/32 Allen wrench insert the wrench into the nylon set screws and “unscrew” each until desired “tilt” is achieved. To assess the angle of the tilt simply slide the axle back into the unit and “observe” how the tilt angle has been impacted. Re-adjust the set screws until you have the desired angle then reinstall the spacer washers, and axle and replaced and tighten the axle nut. Refer to the Friction Pivot Adjustment section (above) for guidance in tensioning the axle system.

“O” Ring Replacement: The protective surface “O” rings (Size 110, 70Buna) can be easily replaced. Sets of extra “O” Rings are available directly from TRS.

First remove the “Tip” from the RAPTOR by removing the two 8x32 stainless fasteners that are holding the tip onto the titanium frame. Cut all the worn, old “O” rings away from the titanium frame body using a sharp, razor blade. Install the “O” rings over the tip of the frame, stretching and forcing them all the way to the rear (vertical) segment of the frame first, then continue to install “O” Rings on the two horizontal frame sections. Reinstall the tip using Blue Locktite on the fasteners. Six “O” Rings fit on the vertical section of the frame and four each on the two horizontal sections for a total of 14 “O” Rings per unit/set.



3/32 Allen Wrench, 14 “O” Rings, Stainless Steel Axle and 2 Ny-Lock Nuts, Titanium frame, 2 Nylon set screws, Stainless steel wrist, 2 spacer Washers, 2 Stainless Tip Fasteners, Black Tip (Medium Hard), Gray Tip (Hard) and Brass Tip.



Stainless Axle & Nut, w/Embedded “Set Point”

DO NOT REMOVE THIS NUT MARKED WITH A “SET POINT”



Titanium frame with 2 Nylon Set Screws “Fully Installed”