



RIGGING GUIDE

Battery Selection

All Electric Downriggers operate on 12V DC Current.

Flooded Lead Acid Batteries:

- Good 12-volt, Group 24
- Better 12-volt, Group 27
- Best 12-volt, Group 31

We recommend a Group 27 or 31, with at least 105 AH or greater.

Larger is OK, but smaller would be a struggle for the battery.

Group 27 & 31 are the most common in this type of boating application.

Note: Amp-hour ratings are not a great measurement for Lead-Acid and battery manufacturers are going away from this measurement. You are seeing more of them provide a 5-hour rate and a 20-hour rate. This means that if you discharge the battery in 5 hours the specificity the current needed to do this – same with the 20-hour rate.

Lithium Ion Batteries:

With Lithium batteries Amp-Hour comes back into play. We would recommend 75 amp-hour rating or larger.

Conductor Gauge for Battery Lead Extensions

0-15 ft. 10 gauge

15-25 ft. 8 gauge

25-30 ft. 6 gauge

Fuse/Breaker Specifications

30 AMP, 32 Volt, waterproof, fast blow, inline breaker.

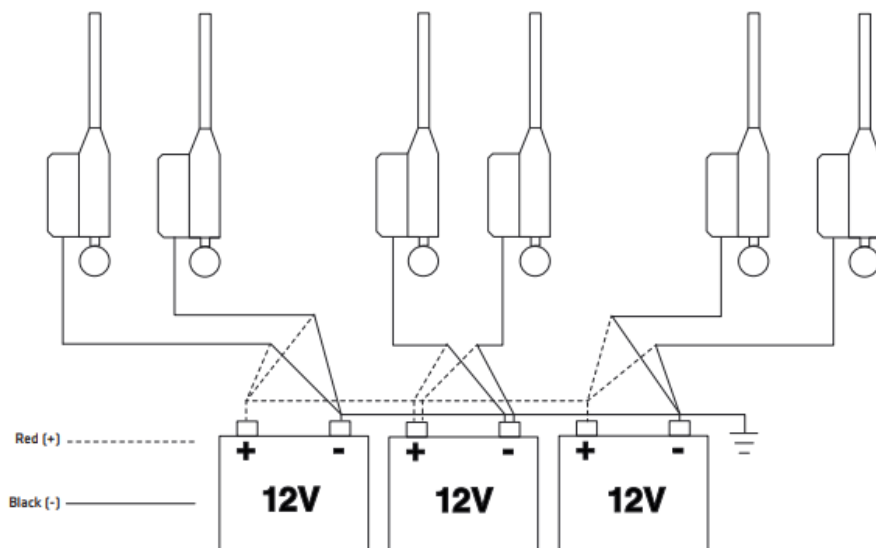


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Grounding

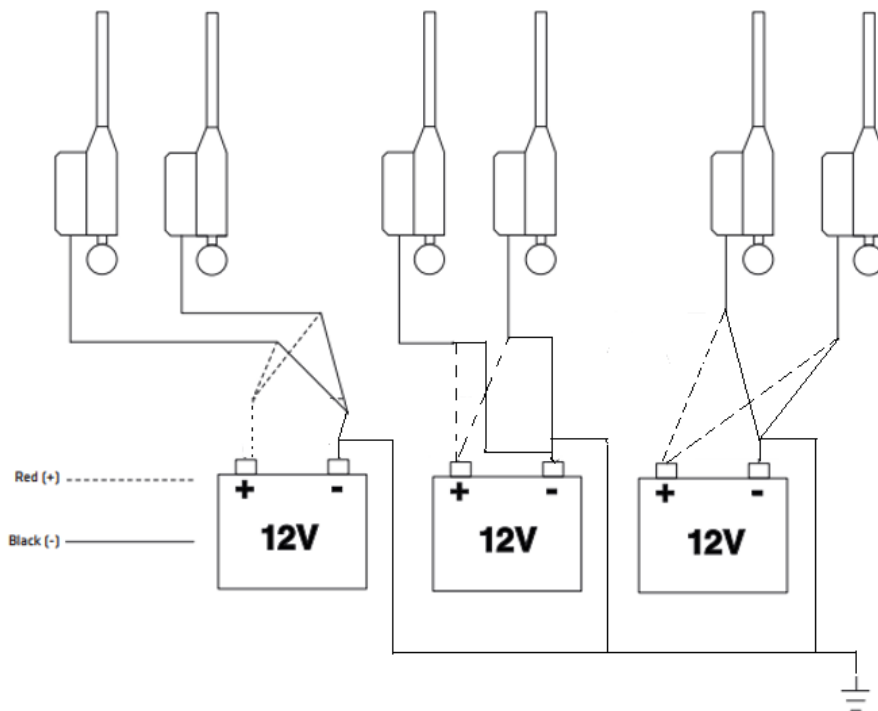
1. When operating multiple electric downriggers, only operate a maximum of 2 downriggers per dedicated battery.
2. For PIC & Short Stop to work the downrigger must be grounded to the boat for these features to function.
 - a. It accomplishes this by using the downrigger cable as the ground in the power supply. The ground is being picked up from the boat through the water and to the downrigger cable.
 - b. If you are just wiring in 1 or 2 downriggers to your cranking battery it will be grounded properly.
 - c. If the user is operating multiple downriggers utilizing batteries separate from the cranking battery there are two wiring options to make sure that all the batteries are properly grounded.

1. **Connect Multiple Batteries in Parallel:** With batteries in parallel there only needs to be one wire running to the ground. (The ground is usually the negative post of the cranking battery)



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- Running Individual Batteries (Separate from the cranking battery):** When running individual batteries for each downrigger set, there needs to be a ground wire running from the negative post of each battery to the ground. (The ground is usually the negative post of the cranking battery).





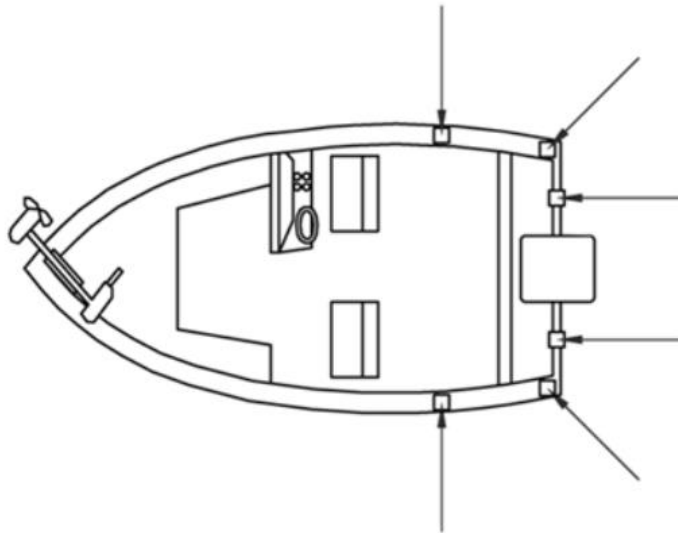
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Installation

When mounting a downrigger on a boat, it should be mounted wherever it is easy to operate and observe. Due to a great variety of boats available, mounting locations can be a difficult decision. Before making permanent changes to their boat they should consider what accessories might need to be used. We will go over mounting locations, and accessories that may need to be used.

Recommended Mounting Locations

Arrows Indicate
Typical Mounting
Locations

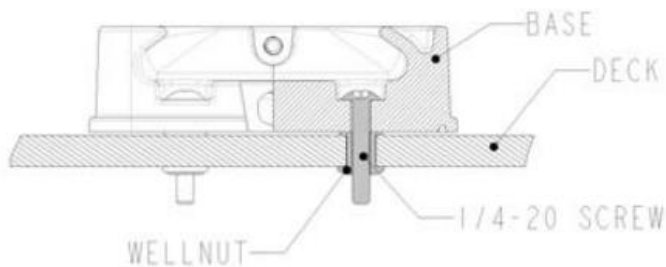




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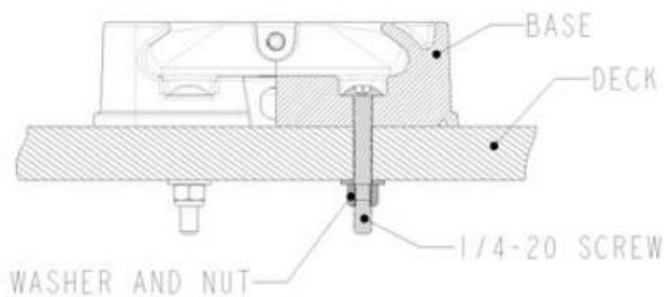
Mounting

Installing the Base on a Boat Decks up to 7/16" thick



Where access to the underside of the deck is not available, the mounting base can be mounted using wellnuts. Use the base as a template to mark locations and drill four wellnut clearance holes. Mount the base using four 1/4-20 x 1-1/2" truss head screws and four wellnuts. Tighten the screws so the wellnuts are firmly

Installing the Base on a Boat Decks thicker than 7/16"



For decks thicker than 7/16", or where the underside of the deck is accessible, mount the base with screws, nuts, and washers. Use the base as a template to mark the locations and drill four 9/32" holes. Use four 1/4-20 x 2" truss head screws and four each flat washers and nuts. Fasten the base to the deck.

NOTE: Wellnuts SHOULD NOT be used on decks thicker than 7/16".



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Installing the Base on a Boat Decks thinner than ¼"



For decks thinner than ¼" or when using the telescopic boom, we recommend the use of the Cannon Deck Plate (#2200693) to prevent deflection and add stability to the deck & downrigger.

Mounting Accessories



Low-Profile Swivel Base (Standard) 2207003
Stainless Steel #1903002

Works on Magnum, Digi-Troll, Optimum, Uni-Troll, Easi-Troll & Lake Troll models

Installation: Mark the four mounting holes & use the four ¼"-20 x 1 1/22" truss head screws to fasten the mounting base to the swivel base. Use the additional four ¼-20 x 2 ½" truss head screws to attach the swivel base to the boat deck.

MSV Part #3991913

This base will fit on all of the Pedestal Mounts, Low-Profile Swivel Base, Deck Plate, Rail/Side Mount, Gimbal Mounts & Clamp Mounts.

Mounting Holes are 4 x 4"

Lifetime warranty on Standard Base.

1-year warranty on Stainless Steel Base.

Remember: The Locking Pin has no warranty, it is considered a wear & tear part.



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Mounting Accessories

Gimbal Mounts: are designed to fit medium-sized 30° flush mounted rod holder built into the gunwale of many larger fishing boats. Only sturdy, high quality rod holders should be used for this temporary mounting system. Gimbal mounts are available in 9" or 12" post lengths & Standard (black or Stainless steel).



Gimbal Mounts:
9" Standard #2250927
12" Standard #2250928
9" Stainless Steel #1903005
12" Stainless Steel #1903006

To mount the downrigger in a 30° flush mount rod holder.

Works on Magnum, Digi-Troll, Optimum, Uni-Troll, Easi-Troll & Lake Troll models & with swivel base, Low Profile Swivel Base, Tab Lock Base.

Mounting Holes are Outer 4" x 4"
Inner 2 ½" x 2 ½"; Tube diameter 1 ½"

Mounting Hardware #2994898 MSV

1-year warranty.

Clamp Mounts: can be mounted at the junction of two rail sections with the aid of two ¼" pieces of plywood. They will protect your rail from any marks from the clamp and provide a non-slip surface.



Clamp Mount #2207327

Maximum Clamp Opening – 2"

Works with Lake-Troll, Sport-Troll, Legacy Easi-Troll and Mini Mag.

Mounting Holes are 2 ½" x 2 ½"

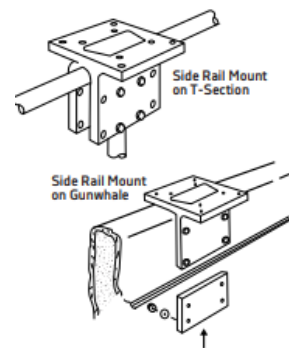
1-year warranty.



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Mounting Accessories

Side/Rail mounts: Can be mounted to a welded T-section. It can also be used at the two-rail section butt joint. In both installations it is recommended to use a non-slip material, such as rubber or a thin wood sheet, between metal surfaces. You can also use these for mounting to a very narrow side gunwale.



Rail/Side Mount #2250940

Works on Magnum, Digi-Troll, Optimum, Uni-Troll, Easi-Troll & Lake Troll models & with swivel base, low profile Swivel Base, Tab Lock Base.

Designed to secure the downrigger to the "T" joints of rails.

Mounting Holes are Outer: 4 x 4";
Inner 2 ½" x 2 ½"

Mounting Hardware #2994896

1-year warranty



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Once the mounting bases and/or accessories have been mounted to the boat the consumer will then have to install the boom, the swivel head, rod holders and if it is a manual downrigger the crank handle.

Installing the Boom on Manual Downriggers

1. Insert boom into frame (Figure 1) and line up holes in boom with holes in frame.
2. Remove 1/4-20 x 2" bolt and 1/4-20 nylon locknut from included hardware bag assembly and insert the locknut into the hex pocket on the nose of the frame. Insert 1/4-20 x 2" bolt into reel side of frame nose. (Figure 2)
3. With a Phillips head screw driver, thread bolt into nylon locknut from step 2 (Figure 2). Tighten bolt until the end of the bolt is flush with the top of the nut. (Figure 3)

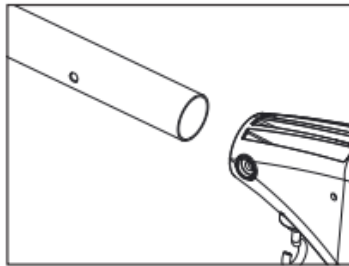


Figure 1

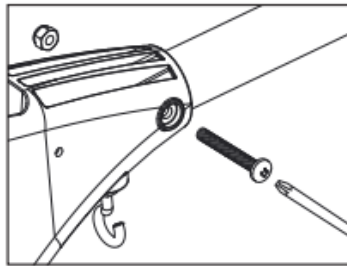


Figure 2

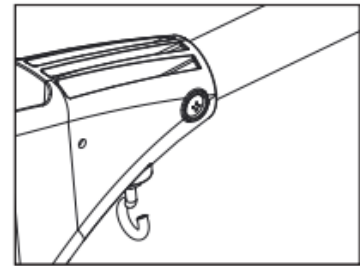


Figure 3

Installing the Ball Hook & Boom on Electric Downriggers

First the consumer will have to install the Ball Hook onto the Boom.

1. This requires the ball hook collar, ball hook, and 1/4-20 nut from the included hardware bag assembly. Thread the nut onto the ball hook, then thread the ball hook into the ball hook collar. Do not tighten yet. (Figure 1)
2. Slide ball hook collar onto the end of the boom and leave it loose. (Figure 2)



Figure 1

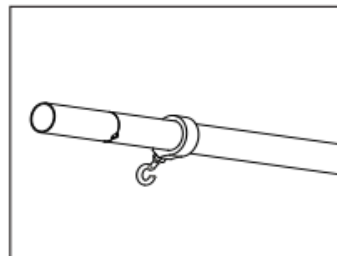


Figure 2



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Installing the Ball Hook & Boom on Electric Downriggers

3. Insert boom with ball hook collar assembly into frame (Figure 3) and line up holes in boom with holes in frame (Figure 4).

4. Remove 1/4-20 x 2" bolt and 1/4-20 nylon locknut from included hardware bag assembly. Insert the 1/4-20 nylon locknut into the hex pocket on the nose of the frame (motor side of frame) then insert 1/4-20 x 2" bolt into reel side of frame nose. (Figure 5)

NOTE: Do not overtighten ball hook or permanent deformation of the boom is possible.

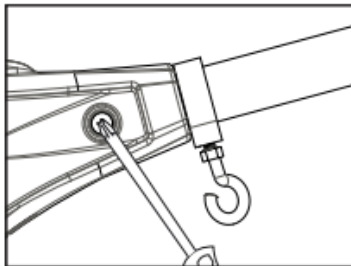


Figure 6

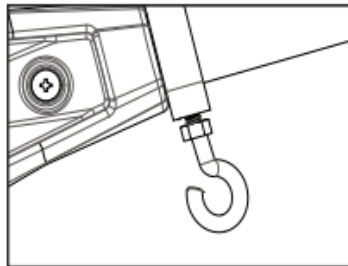


Figure 7

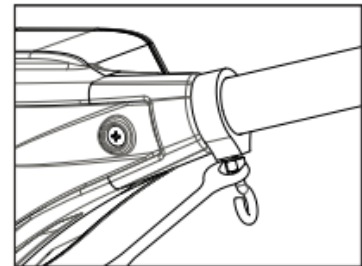


Figure 8

Adjusting the Telescopic Boom Length

To adjust the boom length (with the boom extending away from you) rotate the boom clamps approximately 1/4 turn counter-clockwise to unlock (Figure 11) and slide the boom section to the desired position. (Figure 12) Once in place, lock the boom clamps by rotating clockwise until tight. (Figure 13)

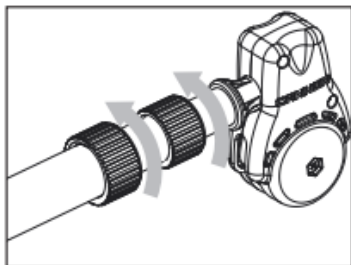


Figure 11

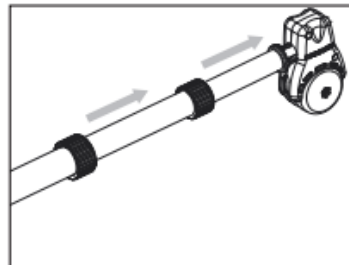


Figure 12

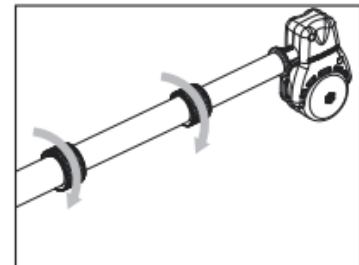


Figure 13



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Installing the Swivel Head Pulley

1. Locate boom end assembly and then insert boom end post into end of the small tube of the boom assembly. (Figure 4)
2. Align hole in boom post with hole in small end tube.
3. Secure boom end with #8 screw as shown. Tighten with Phillips head screw driver by turning screw clockwise until tight. (Figure 5)

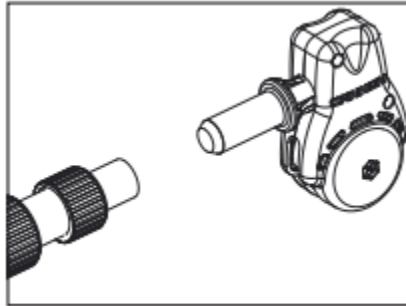


Figure 4

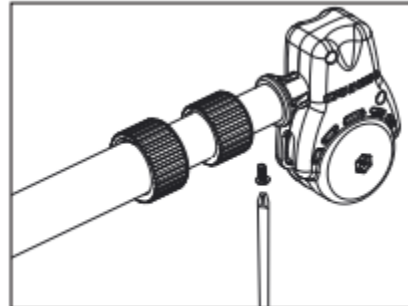
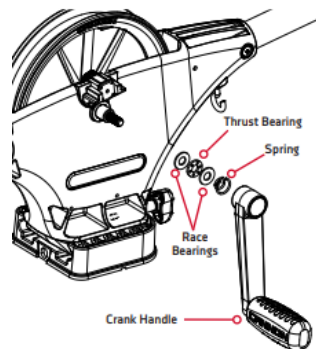


Figure 5

Installing the Crank Handle Assembly to Manual Downriggers

1. Make sure the thrust bearing is placed between both thrust washers. The spring should be oriented with the narrow end toward the bearing.
2. Slide the bearing, washers and spring over the shaft.
3. Carefully thread the crank handle onto the shaft and continue turning the handle clockwise until the clutch is fully tightened.





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Installing the Rod Holder

1. Attach the rod holder elbow to the downrigger on the left side using the supplied spring and knob.
2. Fasten rod holder to rod holder elbow using supplied spring and knob. The rod holder can be adjusted by loosening either knob until the locking teeth are free from each other. Rotate the rod holder or arm to the desired position and re-tighten knob.

CAUTION: This rod holder is intended for use of up to 30 lb. test line only and is not recommended for use with any tackle IGFA (International Game Fish Association) rated higher than 30 lb. A safety strap (not included) is recommended for all applications.

NOTE: The rod holder assembly is not covered under warranty when used with tackle above 30 lbs. Equipment placed in the rod holders and the loss thereof is the responsibility of the user and is in no way warranted by Johnson Outdoors, Inc. Mounting must be in accordance with the above instructions to comply with the product warranty.

