

ELECTRIC DOWNRIGGERS

Installation Instructions

INTRODUCTION

THANK YOU

Thank you for purchasing a Cannon downrigger. We have designed your new downrigger to be an accurate and reliable tool that will enhance fishing control and improve your ability to catch fish. We hope that you enjoy the use of your new downrigger and enjoy the benefit of controlled depth fishing for years to come by always following safe boating practices and laws wherever you are fishing.

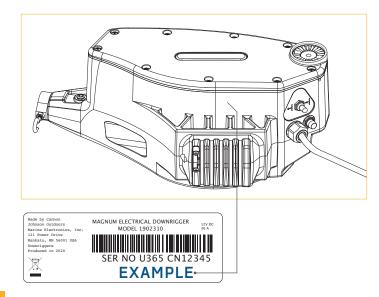
REGISTRATION

Remember to keep your receipt and immediately register your downrigger. To receive all the benefits for your product warranty, please fill out and mail the enclosed registration card, or you may complete registration online at cannondownriggers.com.

SERIAL NUMBER

Your Cannon 11-character serial number is very important. It helps to determine the specific model and year of manufacture. When contacting Consumer Service or registering your product, you will need to know your product's serial number. We recommend that you write the serial number down in the space provided below so that you have it available for future reference.

> **NOTICE:** The serial number on your Cannon Magnum downrigger is located on the bottom of the downrigger frame.



PRODUCT INFORMATION (For Consumer Reference Only)

del:
ial Number:
chase Date:
re Where Purchased:

SAFETY CONSIDERATIONS

Please thoroughly read this user manual. Follow all instructions and heed all safety and cautionary notices below. Use of this downrigger is only permitted for persons that have read and understood these user instructions. Minors may use this product only under adult supervision.

▲ WARNING

You are responsible for the safe and prudent operation of your vessel. We have designed your Cannon product to be an accurate and reliable tool that will enhance boat operation and improve your ability to catch fish. This product does not relieve you from the responsibility for safe operation of your boat. You must avoid hazards to navigation and always maintain a permanent watch so you can respond to situations as they develop. You must always be prepared to regain manual control of your boat. Learn to operate your Cannon product in an area free from hazards and obstacles.

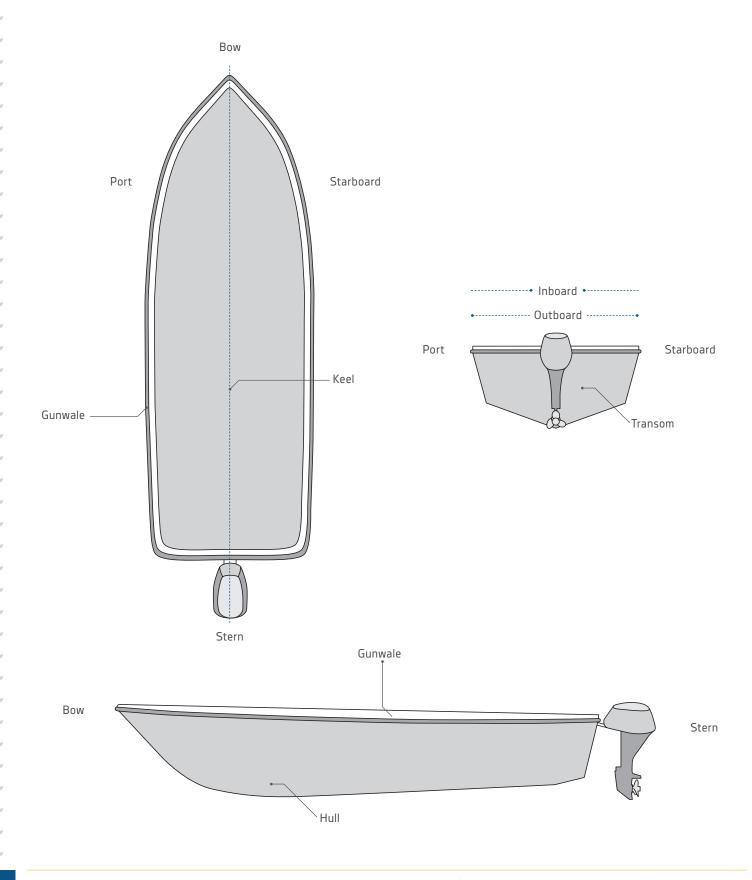
WARNING

It is recommended to only use Johnson Outdoors approved accessories with your Cannon. Using non-approved accessories including those used to mount or control your product may cause damage, unexpected operation and injury. Be sure to use the product and all approved accessories, including remotes and/or devices, safely and in a manner directed to avoid accidental or unexpected operation. Keep all factory installed parts in place including motor, electronic and accessory covers, enclosures and guards. Failure to adhere to this warning may affect your warranty.

WARNING

Do not touch the Spool/Reel while the downrigger is in use. Holding or touching it may result in moderate to severe injuries.

KNOW YOUR BOAT



INSTALLATION

INSTALLING THE MAGNUM

Your new Cannon Magnum comes with the hardware you'll need to directly install it to the boat. Cannon recommends mounting your downrigger using a deck plate and also offers a variety of accessories to customize your installation. Read these installation instructions to learn more and visit cannondownriggers.com for a full list of accessories. To install the downrigger directly to the boat, please follow the instructions provided in this manual. Please review the parts list, mounting considerations and tools needed for installation prior to getting started. For additional product support, please visit cannondownriggers.com.

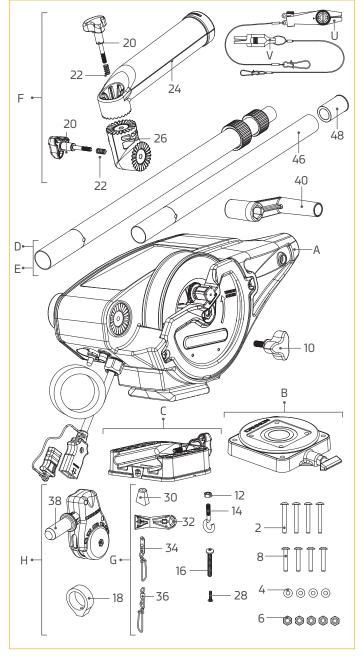


INSTALLATION PARTS LIST

Item / Assembly	Part #	Description	Qty.
А	×	CANNON DOWNRIGGER ASSEMBLY	1
В	3991913	CNN ASSY, SWIVEL BASE	1
С	3991930	ASSY-CNN, MNT BASE	1
D	3392010 ♦	ASSY, BOOM TELESCOPIC, SS *TS*	1
E	2210821	ASY BOOM TELESCOPIC	1
F	3991904	ASSY-CNN, ROD HOLDER	1
G	3994807	ASSY-BAG, DT PRO/MAG ST	1
Н	3994815	BAG ASSY, BOOM END	1
U	2277002A	ASY HDW RELEASE UNIVERSAL	2
V	2200109 ♦	SALTWATER RELEASE, OR8 BE *TS*	2
2	9280720	HDW SCR 1/4 20X2 TRUSS HD PHIL	4
4	2371712	WASHER-FLAT 9/32 X 5/8 X 1/16	4
6	2263103	NUT-1/4-20 NYLOCK SS	5
8	9280713	HDW SCR 1/4 20X1 1/2 TRUSS HEA	4
10	3390103	KNOB, SOFT GRIP, CLUTCH	1
12	2263102	NUT-HEX 1/4-20 SS 300SRS	1
14	9040040	HDW BOLT 1/4-20 ROLLEDTHD HOOK	1
16	3393461	SCREW-1/4-20 x 2" SS, PPH	1
18	3397900	BALL HOOK EXTRUSION	1
20	3390101	KNOB-CANNON, SOFT GRIP	2
22	2287002	HDW SPRING RELEASE PIN	2
24	3392033	TUBE, DUAL AXIS RD HLDR	1
26	3394200	ARM, DUAL AXIS-ROD HLDR	1
28	2372100	SCREW-#8-18 X 5/8 THD* (SS)	1
30	9100101	CUSHION SLEEVE TERMINATOR	1
32	9100100	CON TERMINATOR	1
34	2200148	ASY SNAP & INSULATOR	1
36	9100620	HDW SNAP SWIVEL 4/0-37 MARLIN	1
38	3990200	ASSY-CNN, BOOM END	1
40	3390910	HANDLE-CRANK, MANUAL	
42	3397175 🔺	INSTRCT, INSTALL, MAGNUM	
44	3397139 🔺	MANUAL DISCLAIMER DWNLOAD INFO	1
46	2290828	24" BOOM-HEAVY DUTY (MAG 5)	1
48	3395905	ADAPTER, BOOM END (MAG 5)	1

- ▲ Not shown on Parts Diagram.

 ★ This part is included in an assembly and cannot be ordered individually.



♦ Only available with the Magnum TS series downrigger.

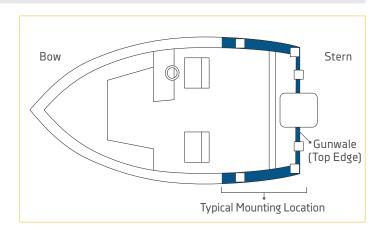
INSTALLING THE MAGNUM



MOUNTING CONSIDERATIONS

Before mounting a Cannon downrigger, please give consideration to the following:

Clear mounting location - Choose a good location on your boat to mount your downrigger. Downriggers are mounted to the Gunwale of the boat. Make sure the area under the mounting location is clear to drill holes and install nuts and washers. Make sure that the mounting location is free from cables or wiring and other critical boat structures. The movable parts of the downrigger, such as the telescopic boom should be positioned so that the weight is far enough beyond the edge of the boat so that it and the downrigger will not encounter any obstructions during operation. In some cases, the profile of the Gunwale is raised which may



prevent the downrigger from sitting all the way against the face of the Gunwale. It may be necessary to shim or cut away around these areas to securely complete the installation. Mounting accessories are recommended to accommodate difference in mounting locations and mounting situations.

- Operation of the downrigger Consider the operation of the downrigger at the selected mounting location. A downrigger should be mounted in a location where it is easy to observe your fishing rod and react quickly to operate the downrigger once there is a fish on the line. There should be enough space to use the downrigger comfortably and with proper ergonomics. It should be easy to reach while still maintaining control of the boat and to retrieve gear. The location of the telescopic boom, weight and rod holder when fully installed should not encounter obstructions. The power cables should reach their intended power source from the mounting location. When installing multiple downriggers, consider the spacing between downriggers units. Mount the downrigger in a location where it is easy to route transducer cables and other downrigger accessory cables and wiring, either to a power source or sonar unit. Make sure that the mounting location does not create a tripping hazard for power cables or accessories used during operation.
- **Mounting accessories** Consider the use of a mounting accessory when installing your downrigger. Consider the location and angle of the rod placement when the downrigger is fully installed on the mounting surface. A deck plate is recommended to provide adequate support and to maximize

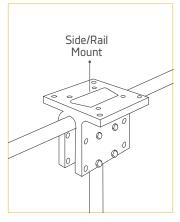
NOTICE: When using the telescopic boom, we strongly recommend the use of a deck plate on all boats to provide adequate stability for the downrigger.

the capability of the product. Cannon offers a complete line of mounting accessories that allow you to optimize your installation to fit the way you fish. Before making any permanent changes to your boat, consider what accessories might be used in your application. To see the complete line of mounting accessories review the variety of accessories explained in this document or visit cannondownriggers.com.

> **NOTICE:** This downrigger weighs approximately 19 lbs. We recommend having a second person help with the installation.

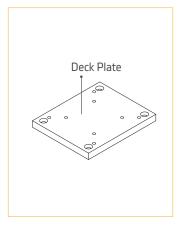
NOTICE: Illustrations are for reference only and may differ from your actual installation.

INSTALLING THE MAGNUM



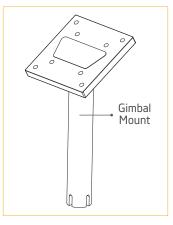
SIDE/RAIL MOUNTS

Can be mounted to a welded T-section. Side/Rail Mounts (Item No. 2250940) 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.



DECK PLATES

Cannon deck plates prevent deflection and add stability to decks. Recommended for attaching the downrigger for initial installation or for mounting accessories. They are necessary to add extra strength to the base material of the boat. Options include Deck Plate (Item No. 2200693).



GIMBAL MOUNTS

Designed to fit medium-sized flush mounted rod holders built into the gunwale of larger fishing boats and cruisers. Only sturdy, high quality rod holders should be used for this temporary mounting system. Gimbal mounts are available in 9" or 12" post lengths with Standard (Item No. 2250927 and 2250928) and Stainless Steel options (Item No. 1903005 and 1903006).



TOOLS AND RESOURCES REQUIRED

- 9/32" Drill Bit
- Pencil, Marker or similar Marking Tool
- 7/16" Box Fnd Wrench
- Wire Cutters
- **Pliers**
- #3 Phillips Screw Driver
- Needle Nose Pliers

- Masking tape
- Anti-seize
- A second person to help with the installation

INSTALLING THE BASE



INSTALLATION

INSTALLING THE BASE >

Item(s) needed:







Review the mounting considerations at the beginning of the installation and select a mounting location. Make sure the downrigger is not connected to a power source.

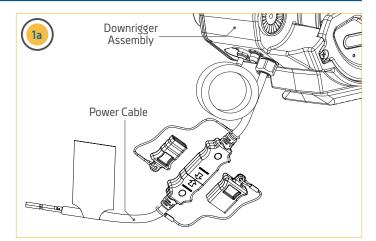
WARNING

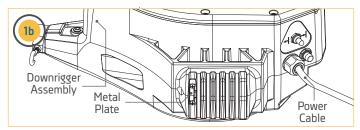
Make sure the downrigger is not connected to a power source.

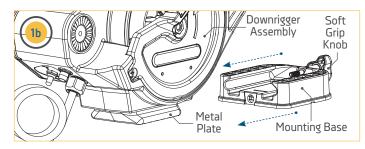
- b. Take the Mounting Base (Assembly #C) and attach it to the Downrigger Assembly (Assembly #A). The Mounting Base is keyed with the bottom of the Downrigger Assembly. The Soft Grip Knob on the Mounting Base screws into a metal plate on the bottom of the Downrigger Assembly. Secure the Mounting Base to the Downrigger Assembly so that the Soft Grip Knob is in the correct position.
- c. In the final Installation, the Mounting Base is installed on the Swivel Base (Assembly #B) for Magnum 10 downriggers. If desired, hold the Downrigger Assembly (Assembly #A) with the Swivel Base at the selected mounting location to check fit and function. Use a second person to help with the installation and test to make sure that the downrigger will operate as desired.
- d. Determine if a mounting accessory, such as a recommended deck plate is needed. Refer to the installation instructions included with any mounting accessory and then complete the downrigger installation.

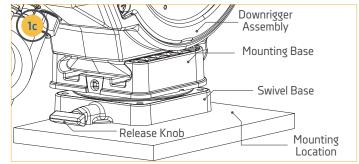
NOTICE: The Release Knob on the Swivel Base can face any direction for your final installation.

NOTICE: The Swivel Base can be purchased as an accessory for the Magnum 5 at cannondownriggers.com.







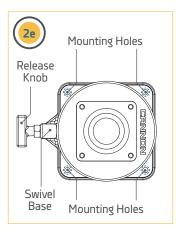


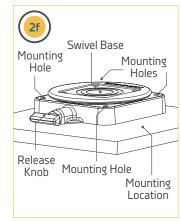
INSTALLING THE BASE

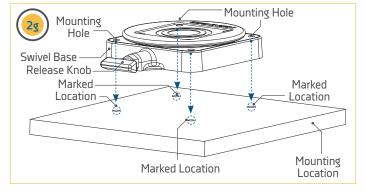
2

- e. Once satisfied with the selected location, begin by using the Swivel Base or Mounting Base as a mounting template.
- f. Take the Base and place it at the desired location. Make sure that the Release Knob or Soft Grip Knob is orientated in the desired direction and the mounting location is clear to drill holes and can accommodate mounting hardware.
- g. With the Base in place, use a pencil, marker, or similar marking tool to mark the location of the 4 mounting holes on the mounting location.

NOTICE: When drilling holes, it is helpful to first cover the surface with masking tape. This will help keep the boat surface unmarked and help with cleanup. Cover the surface and then mark the location to drill. Once the pilot holes are drilled remove the masking tape before continuing installation.





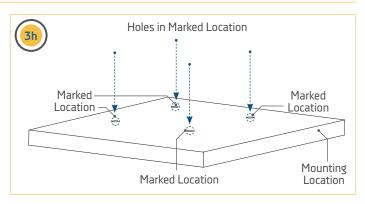


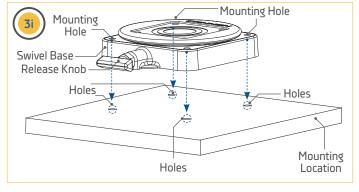
3

- h. With the location marked, set the Base aside and drill holes, one in each of the four marked locations using a Drill with a 9/32" Drill Bit.
- i. Return the Base to the mounting location and align it with the four drilled holes. Orientate it back in the desired direction so the mounting holes in the Base align with the drilled holes in the mounting location and the Release Knob or Soft Grip Knob in the desired direction.

NOTICE: Mounting the Swivel Base is optional. If it is preferred to use the Mounting Base only, use the mounting base as a template for drilling holes. To secure the Mounting Base to the deck use four 1/4-20 X 2" Phillips Truss Head Machine Screws (Item # 2) four Flat Washers (Item #4) and four 1/4-20 Nylock Nuts (Item # 6).

NOTICE: If only installing the Mounting Base and the Swivel Base was either not used or not inculded with your downrigger, continue to Step 6.





INSTALLING THE BASE

Item(s) needed:

#2 x 4

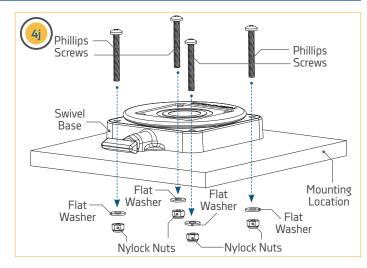
⊚ #4 x 4

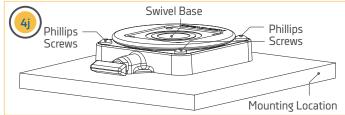
@ #6 x 4

- Take four of the 1/4-20 X 2" Phillips Truss Head Machine Screws (Item # 2) and apply anti-seize. Then place one in each of the Mounting Holes. The Truss Screws should pass through the Swivel Base and the drilled holes in the mounting location.
- k. Secure the Truss Screws in place with four Flat Washers (Item #4) and four 1/4-20 Nylock Nuts (Item # 6). Take one Flat Washer and place it on the end of each Truss Screw. Secure each Truss Screw and Flat Washer with Nylock Nuts using a #3 Phillips Screwdriver. Hand tighten, or tighten to 45 ft-lbs. To prevent seizing of the stainless steel hardware, do not use high speed installation tools.

NOTICE: To prevent seizing of the stainless steel hardware, do not use high speed installation tools. Wetting the screws or applying an anti-seize may help prevent seizing.

NOTICE: Consider installing an optional Cannon Lock on the Mounting Base for added security. (Item No. 1903020)

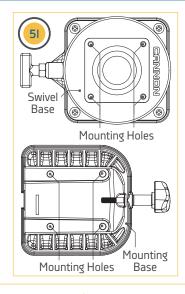


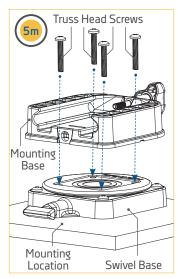


Item(s) needed:

#8 x 4

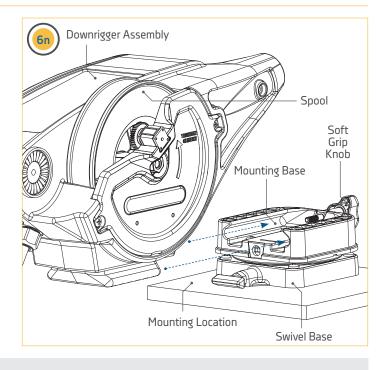
- The Mounting Base will be installed to the Swivel Base. At the beginning of the installation, the Mounting Base was attached to the Downrigger Assembly. Recall the orientation of the Soft Grip Knob and the orientation of the Downrigger Assembly in its intended installation position.
- m. Remove the Mounting Base from the Downrigger Assembly and place it back on the Swivel Base in the same orientation. The mounting holes in the corners of both the Swivel Base and Mounting Base should align. Take four of the 1/4-20 X 1 1/2" Truss Head Screws (Item # 8) and use them to secure the Mounting Base to the Swivel Base using a Phillips screwdriver.





INSTALLING THE CLUTCH KNOB

Once the Base(s) are secured together, replace the Downrigger Assembly on the Mounting Base and secure it with the Soft Grip Knob. Hand tighten.



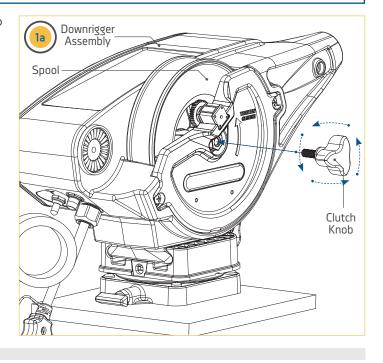
INSTALLING THE CLUTCH KNOB >

Item(s) needed:



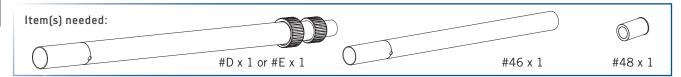
#10 x 1

a. Take the Clutch Knob (Item #10) and install it into the side of the Downrigger Assembly. The Clutch Knob is installed on the side of the downrigger where the Spool is located. When installing the Clutch Knob, insert it into the center of the downrigger spool and turn it counterclockwise to tighten.

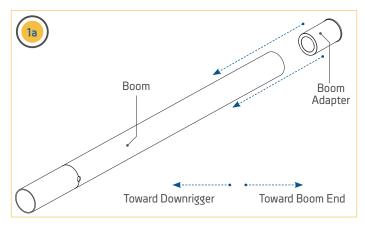


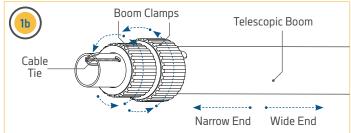
INSTALLING THE BOOM OR TELESCOPIC BOOM >

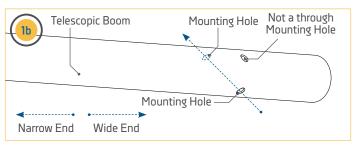


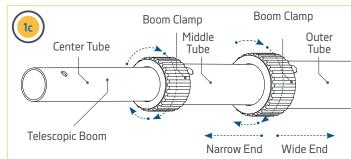


- For the Magnum 5 downrigger, take the Boom (Item #46) and identify both ends. The end of the Boom with the screw hole closest to the edge will be placed the furthest from the Downrigger Assembly. Take the Boom Adapter (Item #48) and insert it into the far end of the Boom. This will be secured later.
- b. For the Magnum 10 or Magnum 10 TS downrigger, take the Telescopic Boom (Assembly #D or Assembly #E) and cut the Cable Tie holding the three tubes of the boom together with a wire cutter or cutting tool. Remove the cut Cable Tie and loosen the Boom Clamps by turning them counterclockwise at the narrow end of the Telescopic Boom.
- The Outer Tube that makes up the wider end of the Telescopic Boom has 3 holes used for mounting it to the Downrigger Assembly. The tubes in the Telescopic Boom need to be extended so that the holes used to mount the boom to the downrigger are unobstructed and are free to pass a bolt through.
- With the Clamps on the Telescopic Boom loosened, the tubes of the boom can slide apart. Slide the Center Tube about 2 inches out from the original position and then re-tighten the Boom Clamp towards the narrower end of the boom turning clockwise. Slide the Middle Tube about 2 inches out from its original position and tighten the second clamp. Check the opposite end of the boom to see if all three holes on the Outer Tube are clear to pass mounting hardware. If not, re-adjust the Boom Clamps and tubes to expose the mounting holes. Secure the clamps by turning them clockwise so that the tubes do not slide, then set aside.









Item(s) needed:

🖶 #12 x 1



Take the Ball Hook (Item #14) and place the Stainless Steel Hex Nut (Item #12) on it. Turn the Hex Nut far onto the Ball Hook, nearly to the end of the threads. Set the Ball Hook Assembly aside.





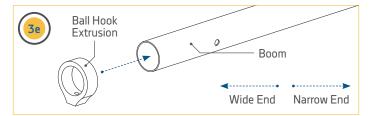
Item(s) needed:

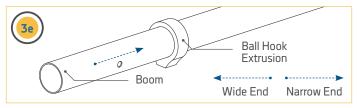


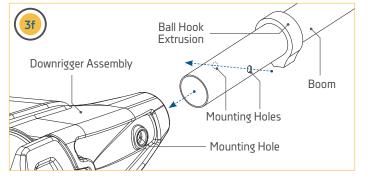
#18 x 1

- Take the Ball Hook Extrusion (Item #18) and place it over the wider end of the Telescopic Boom, opposite the Clamps or the downrigger side of the Boom. At this point in the installation, the Ball Hook Extrusion will slide freely on the Boom.
- Take the Boom with the Ball Hook Extrusion and note the location of the three holes on the end of the boom. The two holes across from each other will be used to secure it to the Downrigger Assembly. The two holes are aligned so that hardware can pass straight through to secure it to the Downrigger Assembly. Place it into the end of the Downrigger Assembly and rotate the holes so that the mounting holes in the Boom Assembly are aligned with the mounting holes in the Downrigger Assembly.

NOTICE: For Telescopic Booms, if preferred, rotate the Boom Assembly so that the plastic protrusion toward the Narrow End of the boom, next to the Boom Clamp, is rotated downward. This is a cosmetic preference and will not affect the operation of the Boom.



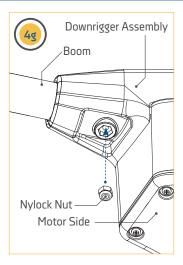


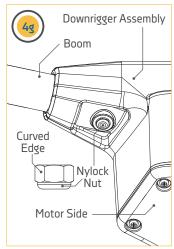


Item(s) needed:

© #6 x 1

The Boom will be held in place with a Screw and Nylock Nut. On the back side of the Downrigger Assembly, on the Motor Side, is a keyed impression for the Nylock Nut. Take the Nylock Nut (Item #6) and press it into the Motor Side of the downrigger, opposite of the Spool Side. The Nylock Nut should be pressed in with the Curved Edge of the Nylock Nut facing outward.

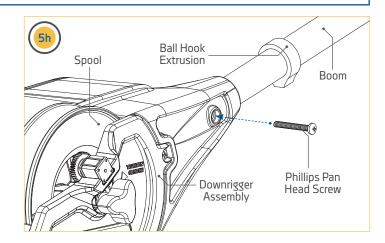




Item(s) needed:

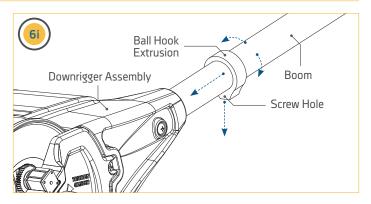
#16 x 1

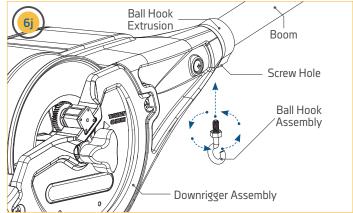
h. The 1/4-20 X 2" Phillips Pan Head Screw (Item #16) will be used to secure the Boom to the Downrigger Assembly. The Phillips Pan Head Screw will pass from the spool side of the downrigger to the opposite side of the Downrigger Assembly and through the Boom. On the Motor Side of the Downrigger Assembly the Phillips Pan Head Screw will be secured into the Nylock Nut installed above. Tighten the Phillips Pan Head Screw with a Phillips screwdriver until the end of the bolt is flush with the top of the Nylock Nut on the reverse side of the downrigger.



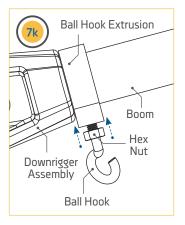
- 6
- With the Boom secured to the Downrigger
 Assembly, slide the Ball Hook Extrusion down on
 the Boom until it is seated against the Downrigger
 Assembly. Rotate the Ball Hook Extrusion so that
 the Screw Hole is facing downward.
- j. Attach the Ball Hook Assembly into the Ball Hook Extrusion and hand tighten it until the Ball Hook Assembly has tightly secured the Ball Hook Extrusion in place on the Boom. Turn the Ball Hook until the hook is in the desired orientation, turning clockwise.

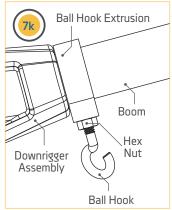
NOTICE: Do not over-tighten the Ball Hook Assembly or denting of the Boom is possible.





- 7
- k. Secure the orientation of the Ball Hook by turning the Hex Nut on the Ball Hook Assembly until it is seated tightly against the Ball Hook Extrusion with a 7/16" wrench. Hand tighten until secure.





INSTALLING THE SWIVEL HEAD/BOOM END

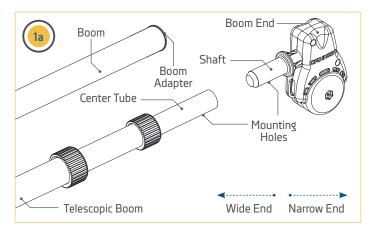
INSTALLING THE SWIVEL HEAD/BOOM END >

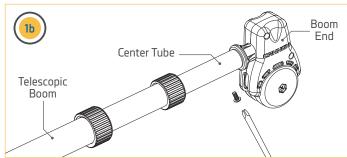
Item(s) needed:

1 #28 x 1



- Next install the Boom End (Item #38) on the end of the Boom. Take the Boom End and find the mounting hole along the shaft. For Magnum 5 downriggers, the Boom End will be inserted into the end of the Boom with the Boom Adapter. For Magnum 10 downriggers, the Boom End will go into the Narrow End of the Telescopic Boom. Make sure the holes in all pieces are aligned.
- b. Once aligned, take the #8-18 X 5/8" Screw (Item #28) and insert it into the end of the Boom Assembly. Secure the screw with a Phillips Head screwdriver by turning clockwise.





TERMINATING THE DOWNRIGGER LINE >

With the body of the Cannon downrigger installed, the Line on the Spool can be terminated. The downrigger comes standard with stainless steel Line held in place on the Spool with a Rubber Band. During the termination, it is very important to keep tension on the Line to keep it wound tightly around the Spool. To keep tension on the Spool, the Clutch Knob is first installed and then the Line is routed and terminated. Check to determine that the Clutch Knob was installed by referring to the "Installing the Clutch Knob" section of these instructions. If installed, complete the terminating procedure by following these steps:

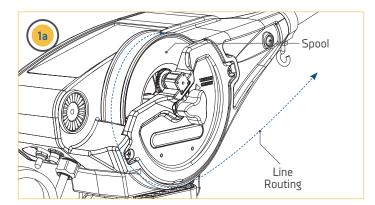
To watch a video of Terminating the Cannon Downrigger, follow the link on-line at https://www.youtube.com/

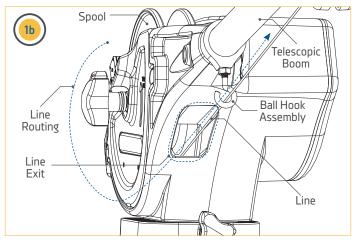
NOTICE: It may be necessary to have a second person help with terminating the Line.

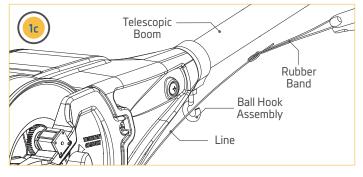
- a. Locate the Rubber Band on the Line. The Rubber Band is securing both the end of the Line tight and holding the Line around the Spool. Keep the Rubber Band secured to the end of the Line, but loosen it from the Spool so that tension can be kept on the Line end by pulling on the Rubber Band. Once it is loose from the Spool, keep tension on the end of the Line by holding the Rubber Band tight.
- b. The Line is wound around the Spool in a counterclockwise direction. Work with the end of the Line the Rubber Band is attached to, so that the end of the Line comes out of the downrigger on the bottom side of the Spool below the Telescopic Boom.

NOTICE: While terminating the Line, it is very important to keep tension on the Line to keep it wound tightly around the Spool.

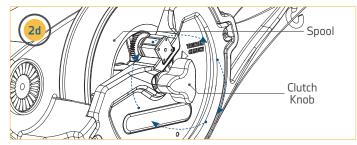
Pull the Line tight by keeping it secure with the Rubber Band. Slide it through the Bolt Hook Assembly.

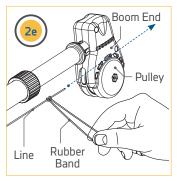


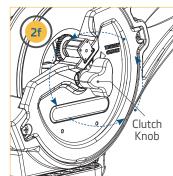




- The Clutch Knob holds tension on the Spool. Loosen the Clutch Knob on the side of the downrigger by turning it clockwise while keeping tension on the Line. Pull the Line so that there is enough slack to feed the Line through the Pulley.
- e. Feed the Line through the Pulley on the Boom End so that it exits the Pulley on the far end of the Pulley away from the base of the downrigger. Once it passes through the Pulley, pull approximately 2 feet of Line through the Pulley.
- Re-tighten the Clutch Knob by turning it counterclockwise and keep tension on the Line.







Item(s) needed:

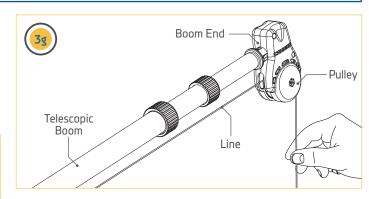


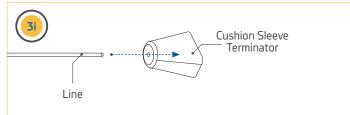
#30 X 1

- g. Have a second person hold the Line just past the downrigger Boom End to keep tension on the Line. Remove the Rubber Band from the end of the Line.
- h. Take a wire cutter and remove any worn or kinked Line.

NOTICE: When routing Line through the Terminator, use only straight Line. Worn or kinked Line can be stressed and may break prematurely when retrieving trolling weights.

Take the Cushion Sleeve Terminator (Item #30) and feed the Line so that the narrower end of the sleeve is threaded first. Thread about a foot of Line through the Cushion Sleeve Terminator.



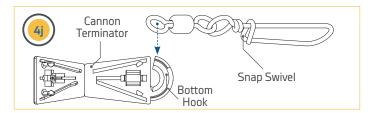


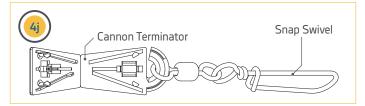
Item(s) needed:



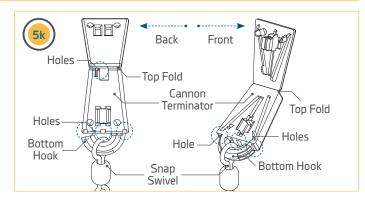
36 X 1 36 X 1

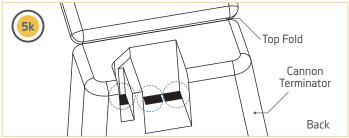
Take the Snap Swivel (Item #36) and attach it to the hook at the bottom of the Cannon Terminator (Item #32). The Snap Swivel can be attached by inserting the end with the smaller metal loop onto the open end of the Bottom Hook on the Terminator. It may be helpful to use a pliers to link the pieces together.

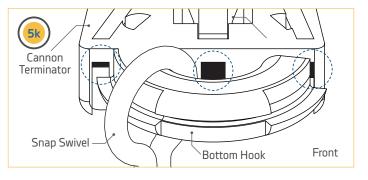




With the Snap Swivel attached to the Cannon Terminator, identify the front and back of the Terminator. Also look at the holes along the Top Fold and Bottom Hook of the Terminator. There are three holes along the Bottom Hook of the Terminator, one on each side of the hook and one in the middle. There are also 3 holes along the Top Fold all in close proximity to each other. The Line from the downrigger will be routed through the holes to terminate it.

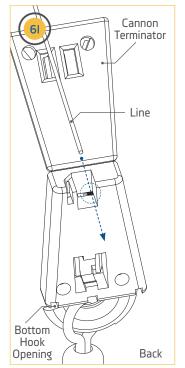


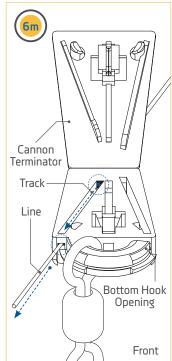


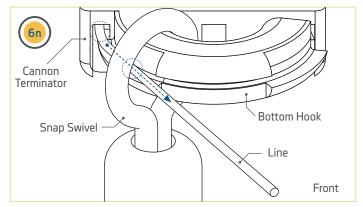


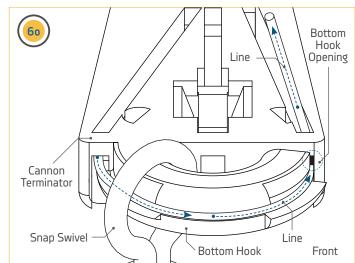
- Turn the Terminator so that back side is facing toward you. The opening to the Bottom Hook should be on the left. With the Terminator in this orientation, place the freshly trimmed Line into the hole furthest to the right along the top hole so that the Line passes from the back of the Terminator through the hole to the front of the Terminator.
- m. When the Cannon Terminator is turned over facing forward, the Line should follow the Track along the left side of the Terminator to the Bottom Hook. The Line should then be pulled to exit out the bottom along the closed side of the Bottom Hook. Pull about 6 inches of Line from the bottom of the Terminator.
- With the Line exiting the bottom of the Terminator, slide the Line along the Bottom Hook so that is passes through the loop of the Snap Swivel linked on the Bottom Hook.
- o. With the Line through the loop on the Snap Swivel, pass it along the Bottom Hook of the Terminator and insert it into the hole in the space at the far end of the Terminator where the Bottom Hook is detached from its base. Pull about 6 inches of the Line through the hole.

NOTICE: When routing the Line through the Terminator, there may be areas where there is slack in the Line. While routing the Line, it is okay for slack to be present. At the end of the termination process, the slack will be pulled tight. Be sure that the slack in the Line does not get kinked, to keep the Line easy to feed through the Terminator.

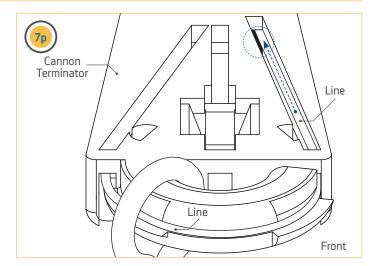


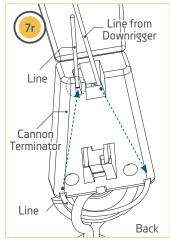


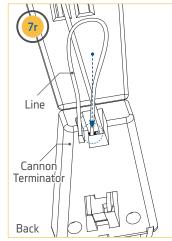




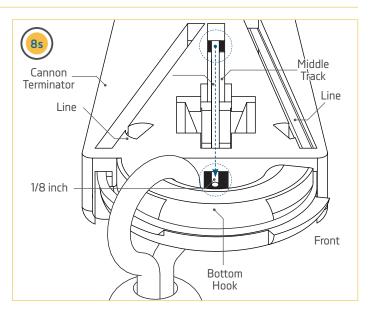
- With the front of the Cannon Terminator still facing toward you, take the Line and place it along the track along the right side of the Terminator and insert it so that it exits the hole at the far end of the track. The Line will exit the hole towards the back side of the Terminator.
- Turn the Terminator over so the back side is facing toward you. Pull about 6 inches of slack through the Terminator.
- Take the end of the Line and put it through the hole on the back of the Terminator right next to the hole that the Line was just fed out of. The hole is in the middle of the Terminator and is directly between the hole that the Line just exited and the very first hole that the Line was fed through on the Terminator.



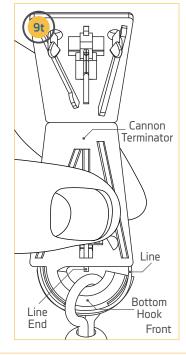


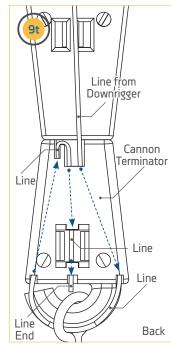


Turn the Terminator over so that the front of it is facing towards you. The end of the Line that was just inserted into the back of the Terminator should run along the track in the middle of the Terminator. Feed the Line all the way along this Track so that it exits the hole in the middle of the Terminator along the middle of the Bottom Hook at the end of the Track. The Line should stick out about 1/8 inch from the Terminator along the Bottom Hook.



With the End of the Line sticking out the final hole by the Bottom Hook, hold the Terminator and squeeze the Line in the middle track to hold it in place. While keeping the end of the Line in place, pull the Line wound through the Terminator in the opposite direction, so that the slack is pulled tight. Use a pliers if necessary to get the Line tight.

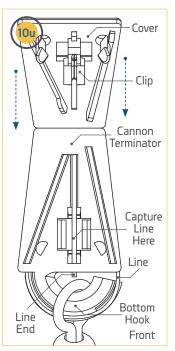


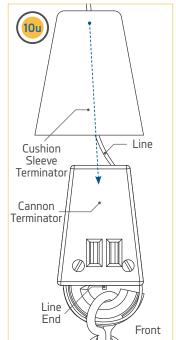


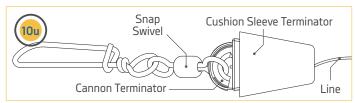
u. With the Line tight, close the Cover of the Terminator so that the Clip in the middle of the top cover captures the Line. Use a Pliers to close the Terminator if necessary. With the Terminator closed, Slide the Cushion Sleeve Terminator securely over the Terminator until it is seated against it. Once fully seated, the downrigger is successfully terminated. A Cannon Weight can then be attached directly to the Snap Swivel.

CAUTION

Do not overload the downrigger. It is designed to retrieve a maximum of 20 lb. weights only.







INSTALLING THE REAR MOUNT ROD HOLDER

INSTALLING THE REAR MOUNT ROD HOLDER >

The Cannon Magnum and Cannon Magnum TS downriggers come with one Rear Mount Rod Holders. The Rod Holder incorporates a two-piece locking tooth design. This allows independent adjustment of the Rod Holder along two axes, which can be easily adjusted every 15° of rotation. The symmetrical design will allow mounting of the Rod Holder on either side of the downrigger or two Rod Holders at the same time. The spring along the shaft of the Soft Grip Knob allows the knob to be loosened and the Rod Holder to be indexed without fully disassembling it. To install, follow the steps below.

NOTICE: 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 instructions to comply with the product warranty.

△ CAUTION

The Rod Holder is intended for use of up to 30lb test line only and is not recommended for use with any tackle IGFA (International Game Fish Association) rated higher than 30lb. A safety strap (not included) is recommended for all applications. The Rod Holder should not be used as a handle or a rest point.

Item(s) needed:



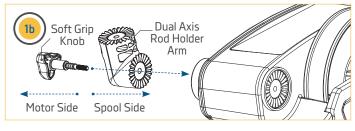
om #22 x 1

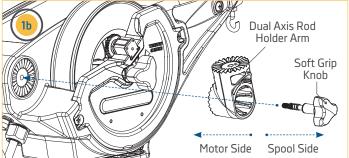


- a. To secure the Rod Holder(s) on the Downrigger Assembly, take one of the Soft Grip Knobs (Item #20) and one Spring Release (Item #22). Place one spring on the end of each Soft Grip Knob.
- b. If the downrigger came with one Rod Holder, determine which side of the downrigger to install the Rod Holder on based on how your downrigger is mounted and how it will be used. Once the location of the Rod Holder is determined, take the Dual Axis Rod Holder Arm (Item #26) and turn it so that the short end of the elbow will be placed against the Downrigger Assembly. The face of the Dual Axis Rod Holder Arm that is installed on the downrigger contains keyed teeth which are matched on the Dual Axis Rod Holder Arm. These keyed teeth will help to hold the position of the knob and help to hold it in place when the position of the holder is changed during use. Secure the Dual Axis Rod Holder Arm with the Soft Grip Knob.







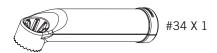


INSTALLING THE REAR MOUNT ROD HOLDER

Item(s) needed:

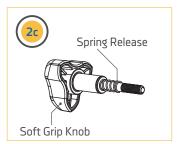


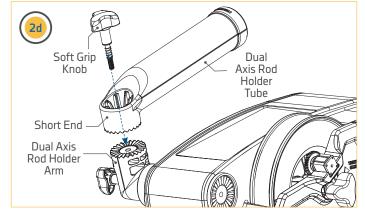
‱ #22 x 1

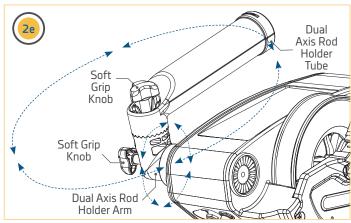


- c. A Soft Grip Knob will be used to secure the Dual Axis Rod Holder Tube to the Arm just installed. Take one of the Soft Grip Knobs (Item #20) and one Spring Release (Item #22). Place one spring on the end of each Soft Grip Knob.
- d. Take the Dual Axis Rod Holder Tube (Item #24) and turn it so that the short end of the piece will be placed against the Dual Axis Rod Holder Arm. The face of the Dual Axis Rod Holder Arm that contains keyed teeth which are matched on the Dual Axis Rod Holder Tube. These keyed teeth will help to hold the position of the knob and help to hold it in place when the position of the holder is changed during use. Secure the Dual Axis Rod Holder Tube with the Soft Grip Knob.
- To adjust the direction of the Dual Axis Rod Holder Arm or tube, loosen the Soft Grip Knob and rotate in the desired direction. Then re-tighten the Soft Grip Knob to secure in place.









RIGGING & INSTALLATION GUIDELINES

For safety and compliance reasons, we recommend that you follow American Boat and Yacht Council (ABYC) standards when rigging your boat. Altering boat wiring should be completed by a qualified marine technician. The following specifications are for general guidelines only:

△ CAUTION

These guidelines apply to general rigging to support your Cannon product. Powering multiple downriggers or additional electrical devices from the same power circuit may impact the recommended conductor gauge and circuit breaker size. If you are using wire longer than that provided with your unit, follow the conductor gauge and circuit breaker sizing table below. If your wire extension length is more than 30 feet, we recommend that you contact a qualified marine technician.

△ CAUTION

Please read the following information before connecting your downrigger to a battery in order to avoid damaging your product and/ or voiding your warranty.

CONDUCTOR GAUGE AND CIRCUIT BREAKER SIZING TABLE

This conductor and circuit breaker sizing table is only valid for the following assumptions:

- 1. No more than 2 conductors are bundled together inside of a sheath or conduit outside of engine spaces.
- 2. Each conductor has 105° C temp rated insulation.
- 3. No more than 5% voltage drop allowed at full motor power based on published product power requirements.

Fuse/Breaker Specifications		Wire Specifications	
30 Amp, 32 Volt, Waterproof, Fast Blow	10 Gauge	8 Gauge	6 Gauge
	0-10 feet	11-15 feet	16-20 feet
	0-3 meters	3-4.5 meters	4.5-6 meters

△ CAUTION

An over-current protection device (circuit breaker or fuse) must be used. Coast Guard requirements dictate that each ungrounded current-carrying conductor must be protected by a manually reset, trip-free circuit breaker or fuse. The type (voltage and current rating) of the fuse or circuit breaker must be sized accordingly to the Cannon downrigger used.

RECOMMENDATIONS FOR MAINTAINING BOAT'S ELECTRICAL CONDITION

Whenever a boat is in water, various submerged parts interact to create weak electrical currents. These weak electrical currents should be controlled to extend the life of the boat's metal parts and ensure a good fish catching environment. In order for the Positive Ion Control and Short Stop (PIC) on your downrigger to work correctly, it is important to make sure your boat is properly set up before installing your downrigger. For full details on how the Positive Ion Control system works, see the "Positive Ion Control" section of the Owner's Manual.

NOTICE: To ensure proper operation of your downrigger, ground the downrigger battery to your boat's electrical system's ground. Always check to see if your boat is properly grounded first. Malfunctions with the Positive Ion Control, communication between units, or loss of operation result from faulty grounding.

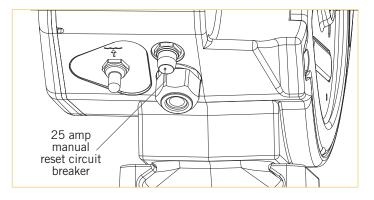
- If the zinc sacrificial anodes on your boat and on the outboard/outdrive are more than half dissolved, it is recommended that they be replaced. Clean anodes on a regular basis with a non-corrosive brush.
- Any coating of slime or growth on the boat should be cleaned off.
- All metal parts including the hull (if metal) should be interconnected by a grounding wire. This includes motor shafts, outdrives, and through hull fittings. This will ensure that the boat is properly grounded to the water and allow Positive Ion Control and Short Stop to work correctly.
- The line on your downrigger should be replaced every 2 years. Etching of the line can weaken it physically and electrically.
- The use of Cannon coated weights and the snap assembly with the insulator will help insulate the weight from the positively charged line.

ELECTRICAL SPECIFICATIONS & WIRING INSTRUCTIONS

The downrigger is rated at 30 amps (full load), 12 volts DC and is protected by a 25 amp manual reset circuit breaker (located under motor housing). Be sure to measure the battery voltage of your boat.

▲ WARNING

Do not run this downrigger on a 24 volt or higher battery system. This will damage the unit and void your warranty. Only connect your downrigger to a 12 volt battery system.



▲ WARNING

It is strongly recommended to power your downrigger with a battery capable of providing high currents for an extended period of time. Only run a downrigger from a Starter battery if it is recharged by an alternator while the downrigger is running.

▲ WARNING

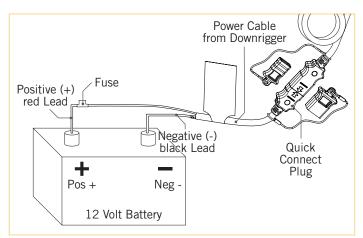
Never connect the (+) and the (-) terminals of the same battery together. Take care that no metal object can fall onto the battery and short the terminals. This would immediately lead to a short and extreme fire danger.

CONNECTING TO THE BATTERY

It is strongly recommended that a fuse or manual reset circuit breaker be installed within 7 inches from the battery on the positive lead of the power cable. In addition, you may also connect the downrigger to a battery selector switch. It is strongly recommended to power your downrigger with a Deep-Cycle marine battery. Only run a downrigger from a Starter battery if it is recharged by an alternator while the downrigger is running.

- 1. Make sure that the downrigger is powered "off" or the Quick Connect Plug on the downrigger Power Cable is disconnected.
- 2. Connect positive (+) red lead to positive (+) battery terminal.
- 3. Connect negative () black lead to negative () battery terminal.
- 4. Reconnect the Quick Connect Plug when ready to use the downrigger.

NOTICE: Control degradation of the power cables and limit corrosion by using anti-oxidant gel on all connections. Do not use wing nuts.



CAUTION

Refer to "Conductor Gauge and Circuit Breaker Sizing Table" in the previous section to find the appropriate circuit breaker or fuse for your downrigger.

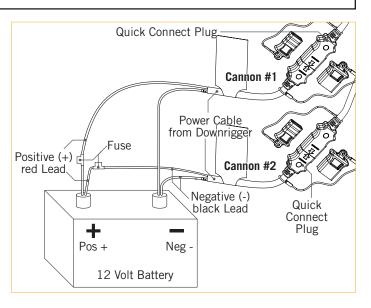
▲ WARNING

For safety reasons, disconnect the downrigger from the battery when the downrigger is not in use or while the battery/batteries are being charged. If installing a leadwire plug, observe proper polarity and follow instructions in your boat owner's manual. Keep leadwire connections tight and solid to battery terminals. Locate battery in a ventilated compartment.

POWERING MULTIPLE DOWNRIGGERS

When operating multiple downriggers, run a maximum of 2 downriggers per dedicated 12 volt battery. Follow the instructions from the "Connecting to the Battery" section of these Installation Instructions. Repeat the directions for each downrigger.

> **NOTICE:** Use the Quick Connect Plug to remove power from the downrigger without touching the battery.



ADDITIONAL CONSIDERATIONS

ADDITIONAL ACCESSORIES CONNECTED TO DOWNRIGGER BATTERIES >

Significant damage to your Cannon downrigger, your boat electronics, and your boat can occur if incorrect connections are made between your downrigger batteries and other battery systems. It is recommended to use an exclusive battery system for your downrigger. Where possible, accessories should be connected to a separate battery system. Radios and sonar units should not be connected to any downrigger battery systems as interference from the downrigger is unavoidable. If connecting any additional accessories to any downrigger battery system, or making connections between the downrigger batteries and other battery systems on the boat, be sure to carefully observe the information below.

The negative (-) connection of an accessory device must be connected to the negative terminal of the same battery that the downrigger negative lead connects to. Connecting to any other downrigger battery will input positive voltage into the "ground" of that accessory, which can cause excess corrosion. Any damage caused by incorrect connections between battery systems will not be covered under warrantv.

AUTOMATIC JUMP START SYSTEMS AND SELECTOR SWITCHES >

Automatic jump start systems and selector switches tie the negatives of the connected batteries together. Please see a qualified marine technician if installing your Cannon downrigger with one of these systems or a selector switch.

SELECTING THE CORRECT BATTERIES >

The downrigger will operate with any lead acid deep cycle marine or Lithium 12 volt battery/batteries. For best results, use a deep cycle marine battery. Maintain battery at full charge. Proper care will ensure having battery power when you need it, and will significantly improve the battery life. Failure to recharge lead-acid batteries (within 12-24 hours) is the leading cause of premature battery failure. Use a multi-stage charger to avoid overcharging. We offer a wide selection of chargers to fit your charging needs. If you are using a crank battery to start a gasoline outboard, we recommend that you use a separate deep cycle marine battery/batteries for your Cannon downrigger.

FISHING WITH THE DOWNRIGGER

ATTACHING THE SNAP ASSEMBLY WITH INSULATOR >

The Snap Assembly with Insulator is used to break any electrical connection between the downrigger and the water. This insulator is used with the Short Stop and Positive Ion Control features of the downrigger.

Short Stop is a Cannon exclusive feature that automatically stops the weight at the water's surface, preventing the lift motor from raising it into the pulley at the end of the boom. When the downrigger line is in the water, a small electrical current flows between the line and grounded metal boat components in the water. When the line clears the water, the current flow stops. The Short Stop system senses this interruption and turns off the motor. The trolling weight insulator is used to break the line contact to the water while the weight is still in the water. Stopping the weight at water level eliminates the line strain caused by a bouncing weight or a weight hitting the boom end and it also prevents the weight from swinging into the boat hull. This feature comes on all Cannon electric downriggers and requires the boat to be properly grounded and the use of an electrically conductive cable such as stainless steel. This feature will not work with mono or braided lines.

Positive Ion Control is a feature that is based on the principle that applying a low voltage positive electrical field into the water where you're fishing will attract fish and increase your chances to catch more fish. Since fish are attracted by a slight positive charge and repelled by a strong positive or negative charge, generating and controlling the correct charge can be critical to the success of your fishing. When PIC is turned on and the downrigger is spooled with line that can conduct an electrical current, the insulator helps to break the connection with the water so that the positive electrical field emitting from the downrigger line is broken.

Item(s) needed:



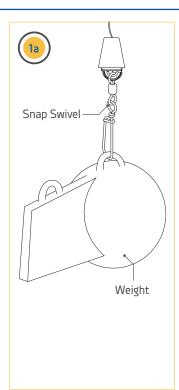
#34 x 1

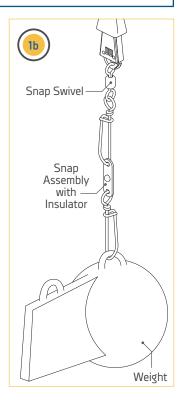
- a. Before attaching the Snap Assembly with Insulator, complete the "Terminating the Downrigger" section of these instructions. The properly terminated line can have a weight attached directly to it.
- b. To begin, make sure that a weight is not attached to the Snap Swivel. Then take the Snap Assembly with Insulator (Item #34) and attach it to the Snap Swivel.
- c. The Weight can then be attached to the Snap Assembly with Insulator.

NOTICE: In some cases it may be necessary to use two Snap Assembly with Insulators connected consecutively to break the electrical connection with the water.



Do not overload the downrigger. It is designed to retrieve a maximum of 20 lb. weights only.





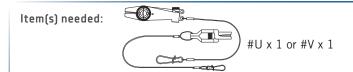
ATTACHING A LINE RELEASE

ATTACHING A LINE RELEASE >

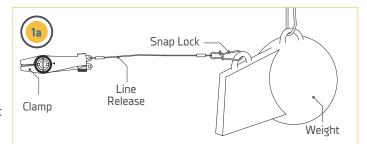
The last step in prepping the downrigger for fishing is to attach a Line Release. To attach the Line Release, first attach a Cannon Weight and then follow the steps below:

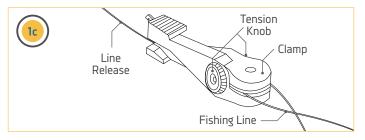
To watch a video on how to attach a Line Release, follow the link on-line at https://youtu.be/qpONbVgbbt8

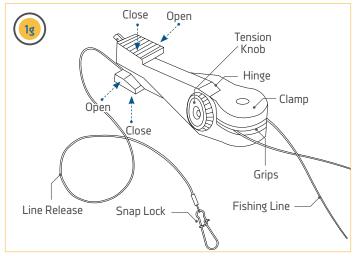




- Take the Release (Item #U or V) and attach the Snap Lock end of the Line Release to the Weight.
- b. Release some line from the fishing rod and reel so that the lure is anywhere from 5 to 100 feet behind the boat. Determine a distance for the line from the fishing pole to drop back from the Weight and select a point for the line to be attached.
- c. Twist a loop in the fishing line at the point that the line would be attached. Attach the line from the fishing rod firmly into the Clamp of the Line Release at the loop created in the fishing line.
- d. Click through a series of increasing tension settings on the Clamp. The Line Release can be used with any test line on salt or fresh water and may be adjusted from 2 to 22 pounds of grip tension on the line.
- e. Once the Line Release is attached to the fishing line, make sure the Fishing Rod is held securely or placed in a holder and open the reel so that line can draw out.
- f. Then set the downrigger depth to lower the Weight to the desired depth in the water.
- g. Once the downrigger Weight is at the desired depth, reel up the slack on the fishing line so that your fishing rod has a slight bend in it. When a fish strikes the lure, the line will separate from the Line Release. Then the fishing line will be free to fight the fish and bring it up on the rod and reel.







NOTICE: To change the Freshwater Line Release tension, turn the Tension Knob towards (+) to increase or (-) to decrease. Tension also may vary according to where the line is placed in the Grips of the Clamp. Higher tension is on the line if it is set back toward the Hinge, and lower if set closer to the opening. To open the Line Release, spread the Release Arms with thumb and forefinger applying pressure to the sides.

NOTES

This completes the installation of your Magnum. A complete Owner's Manual can be downloaded at cannondownriggers.com.

RECOMMENDED ACCESSORIES

ROD HOLDERS & TRACK SYSTEMS

Incredible versatile rod holders, rock-solid bases and plates. It's everything you need to rig your boat up to fit the way you fish - and you can mount it all up on our track system, which features interchangeable components made of high-strength aluminum.







Aluminum Mount Track



Swivel Base Pedestal

MOUNTS

Rig it up and reel 'em in with a variety of mounting options suited to fit the way you fish.



Swivel Base



Deck Plate



Gimbal Mount

LINE RELEASES & WEIGHTS

We offer a wide variety of downrigger accessories designed to give you the best fishing experience:



- Uni-Line Release
- Uni-Stacker Release
- 4 to 16 lb. weights

For a complete listing of Cannon accessories, visit cannondownriggers.com



Cannon Consumer & Technical Service Johnson Outdoors Marine Electronics, Inc. PO Box 8129 Mankato, MN 56002-8129 121 Power Drive Mankato, MN 56001 Phone (800) 227-6433 Fax (800) 527-4464



©2020 Johnson Outdoors Marine Electronics, Inc.
All rights reserved.