

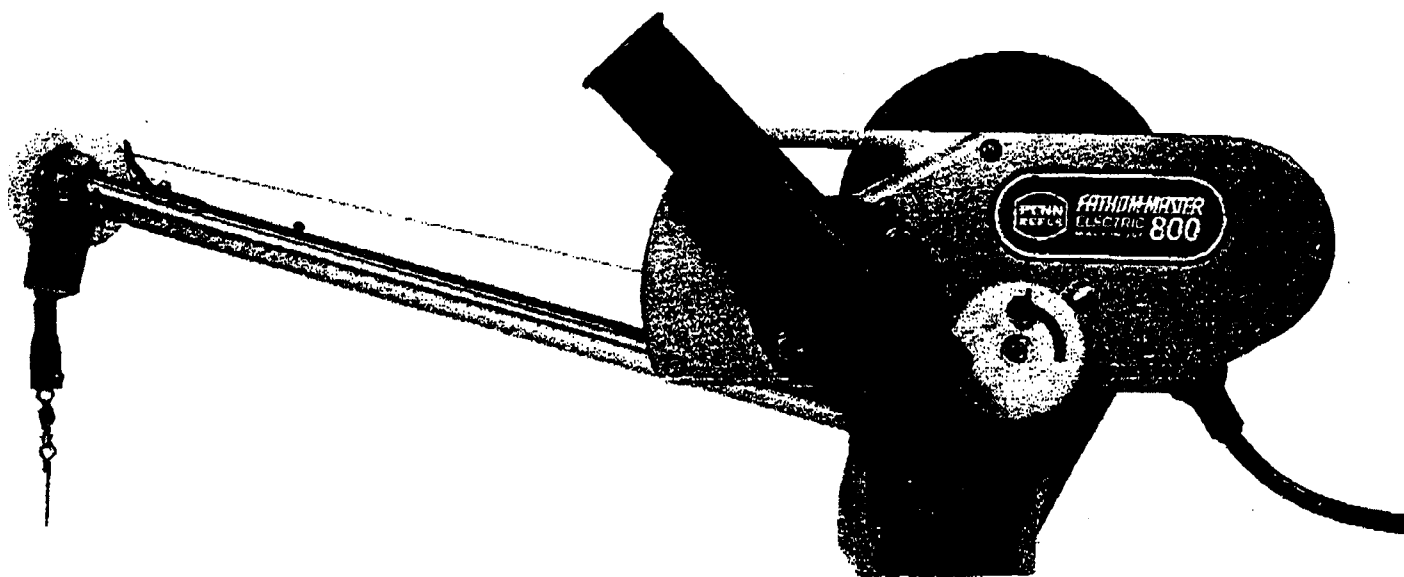


FOR DEEP TROLLING

FATHOM-MASTER[®]

ELECTRIC DOWNRIGGER

800-825



PLEASE TAKE TIME TO
CAREFULLY READ THIS MANUAL.
PLEASE KEEP THIS MANUAL SAFE
AND DRY FOR FUTURE REFERENCE.

MODEL 800 SHOWN WITH OPTIONAL
810RH ROD HOLDER.

OWNER'S MANUAL

COVERING FATHOM-MASTER[®] 800/825 ELECTRIC DOWNRIGGER

**INSTALLATION
MAINTENANCE
HOW TO USE
PARTS
ACCESSORIES**

PENN FISHING TACKLE MFG. CO., 3028 W. HUNTING PARK AVE., PHILA., PA. 19132 MADE IN USA

NEW AND IMPROVED



FATHOM-MASTER®

ELECTRIC DOWNRIGGER

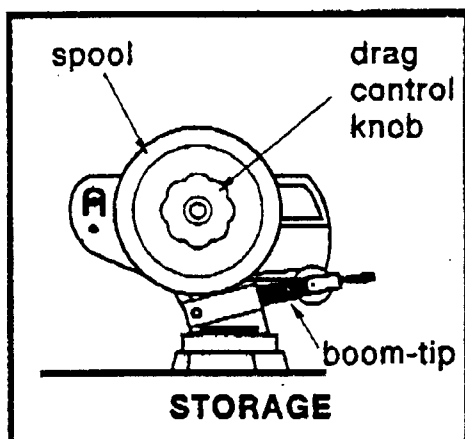
800-825

Ultra-Violet Protection Black Housing

Some Of The New Features Are:

- Automatic Electronic counting feature for every 100 ft. going up or down to a possible 999 ft. depth. No need to reset switch every 100 ft. when retrieving trolling weight, as in previous gray models.
- A dual fuse circuit in the downrigger that greatly reduces the possibility of electrical damage to the downrigger.
- For greater reliability, a double sealed water tight up-down switch.
- Improved water resistant features on frame. Lid also features spray deflector around counter cup.
- For compact storage, the boom and boom-tip can be removed from the downrigger frame quickly and without tools (Model 825 only).
- By consumer request, a new black extra reinforced frame that is extremely resistant to ultra-violet rays.

ASSEMBLING YOUR FATHOM-MASTER® 800-825 DOWNRIGGER

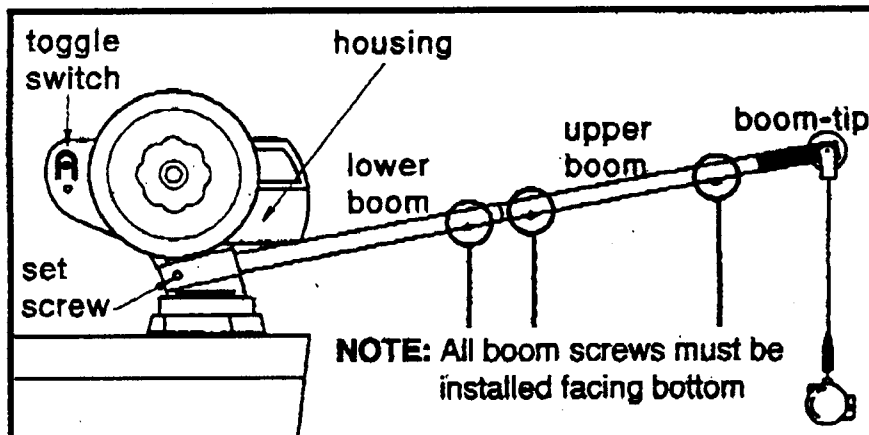
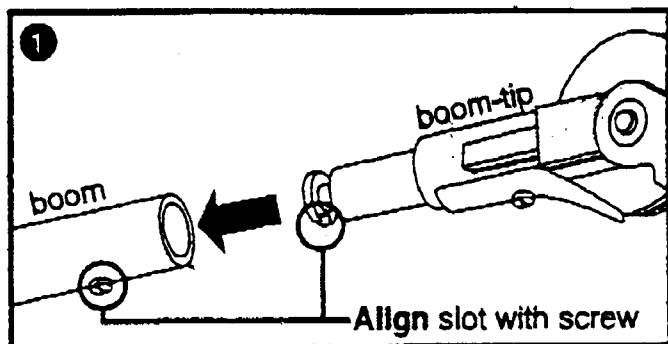


Mount and install according to the owner's manual.

When the power cord is plugged in, you will hear a long single "beep" indicating that power is running to the unit.

Back off the drag by turning knob counter-clockwise (maintain a slight tension on the spool).

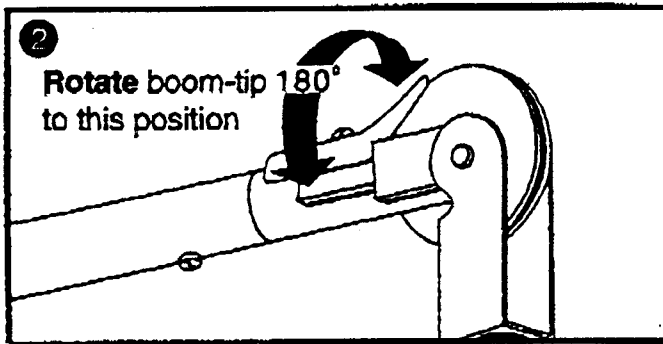
Pull off the boom-tip along with the cable and connect to the boom (refer to illus. 1 & 2 below).



Insert boom-tip and boom(s) into downrigger housing. Remember to insert set screw on downrigger unit.

Re-tighten drag clockwise, leaving about 1ft. of cable down from the boom-tip.

Attach the weight, and tighten drag knob so that the trolling weight will not make the drag slip. Remember not to over tighten. You want the drag to slip under pressure if the weight snags the bottom, nets, etc.



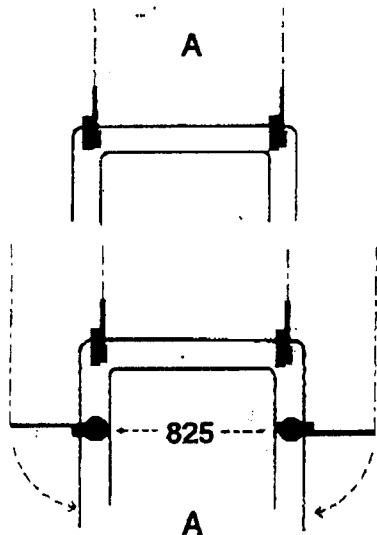
INSTALLING THE 800/825 ELECTRIC DOWNRIGGER

RECOMMENDED FATHOM-MASTER® 800 INSTALLATION METHODS

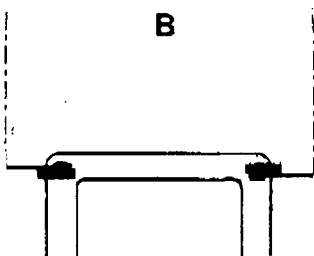
**READ MANUAL
CAREFULLY BEFORE
DRILLING HOLES**

SELECTING LOCATION

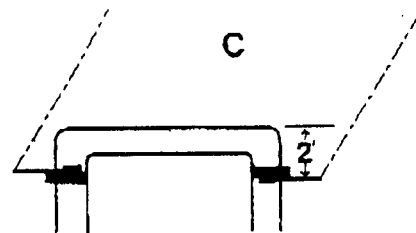
1. Ease of accessibility to operate the downrigger and rod/reel. Have someone else firmly hold the downrigger in the position you select and go through the motions of using it while handling a rod/reel at the same time. Pretend that a fish was hooked and you have to get quickly to the downrigger and rod/reel. The model 800 can be mounted on the transom or either side of the boat. The boom pulley automatically swivels to the pull of the cable.



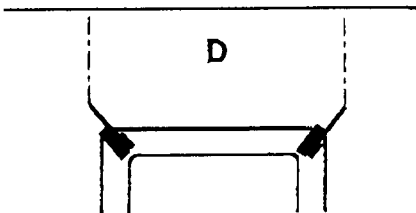
A. Standard mounting method. This system is also good when you are considering using model 825 swivel base downriggers forward of your 800 models.



B. This mounting method separates the two cables more than the standard method. This method keeps the cable farther from the outboard engines, swimming platform, etc., allowing the boat to make tighter turns while deep trolling.



C. When mounting model 800 downriggers forward of the transom do not exceed a distance of 2 ft. (610mm). Going beyond this distance will affect the turning radius of the boat while deep trolling.



D. The downriggers can also be mounted at an angle. The boom tip pulley will automatically track with the cable.

PENN OFFERS FOR YOUR CONVENIENCE AN OPTIONAL ACCESSORY THAT MAY PERMIT YOU TO QUICKLY MOUNT YOUR 825 DOWNRIGGERS. THIS ACCESSORY UTILIZES AN EXISTING FLUSH-MOUNT ROD HOLDER ON YOUR BOAT. (QUICK-MOUNT® JR. 632 OR QUICK-MOUNT® SR. 634) (SEE PAGE 16).

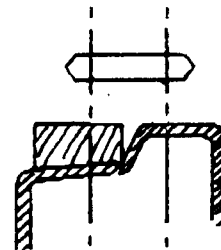
If your boat is now equipped with Fathom-Master® 600 manual downriggers, the electric 800 will slide on your present base plates.

2. Strive for maximum clearance of the boom tip away from the boat. While using the downrigger during rough sea conditions, the trolling weight will have a tendency to swing around when coming out the water.

3. The top surface of the base plate (16) on the swivel base has a raised ridge on one end of the plate. The purpose of this ridge is to locate the downrigger in the proper position so that the hold-down knob (59) can be tightened down into the base plate. The downrigger will slide on or off only at the opposite end of the raised ridge.

4. A clearance of 4 1/4" (107.95mm) is required between the end of the base plate (opposite the ridge) and any obstruction (ie: cleats, navigation lights, etc.) for the downrigger to be installed or removed.

5. The base plate measures 4 1/2" (114.3mm) long and 3 1/4" (82.55mm) wide and requires a flat mounting surface (not necessarily level). Be sure that there is an additional 1/2" (12.70mm) clearance on both sides of the length of the base plate. If a flat mounting area does not exist where you want to install a base plate, you can custom fit a wood spacer block.



PENN OFFERS AS OPTIONAL ACCESSORIES A SINGLE ROD HOLDER OR A DUAL ROD HOLDER. BOTH ATTACH TO THE DOWNRIGGER FRAME. SEE PAGE 16.

INSTALLING THE 800 BASE PLATE

1. After selecting the location of the base plate check underneath the deck that there is sufficient space for the 4 mounting nuts and washers.

Note: For your convenience Penn supplies the stainless steel mounting hardware, 4 bolts 1/4" x 20 with nuts and washers.

MISSING PAGES
3
4
OF THE MANUAL

washers and nuts on to the mounting screws. Tighten securely but do not over-tighten. For best results, tighten opposite screws as you go, similar to screwing lug nuts on a car tire.

9. Position the swivel base cover and base plate on top of the swivel base (make sure that the base plate nut is taped to the bottom side of the plate). Install the base plate mounting screws firmly, but do not over-tighten. Again, tighten opposite screws as you go, lug-nut style (See step 8).

Note: Penn supplies the four stainless steel base plate mounting screws.

10. The 622 Adjustable Swivel Base rotates to any one of 36 different positions, providing a full circle (360°) of rotation. To adjust, push one or more of the finger grips (shark fins) on the adjusting ring counterclockwise until it stops (about 1 inch). While holding the adjusting ring in this "adjust" position, turn the downrigger into the desired position. Release pressure on the adjusting ring, and the 622 will snap into that position. Remember, to turn and adjust the 622, you must first push the adjusting ring counterclockwise until it stops.

11. After fishing with the 622 Adjustable Swivel Base, you may want to change the base's drag tension (rotates too easily or too hard). Remove the base plate and swivel base cover, and adjust lock nut, using a $\frac{3}{4}$ " socket or box wrench. The lock nut is located in the center of the swivel base top.

12. Although there should be no need to disassemble the 622 Adjustable Swivel Base, except perhaps for occasional internal maintenance and lubrication, you should use the exploded view as a guide. After removing the base plate and swivel base cover, remove the lock nut with a $\frac{3}{4}$ " socket or box wrench. Then lift off the entire swivel base top, locking ring, and adjusting ring. When removing the adjusting ring, be careful not to lose the two return springs.

During maintenance, make sure that all inside surfaces are clean and dry, then thoroughly lubricate the brass

shaft in the center of the swivel base bottom with waterproof grease. Clean the two return springs and lubricate with a light oil.

In order to re-assemble the 622, begin by installing the (2) return springs into the (2) longer pockets, which are located opposite each other on the swivel base bottom.

Next, locate the small circular indentations on the swivel base bottom and adjusting ring. Line these indentations up, and carefully lower the adjusting ring onto the swivel base bottom. While applying downward pressure, slowly rotate the adjusting ring clockwise until it drops fully into position. Check to be sure that the cam followers (raised bumps) on the adjusting ring are lined up with the vertical channels on the swivel base bottom.

Next, slide the serrated locking ring onto the swivel base bottom. Position is not important, as long as the teeth point up.

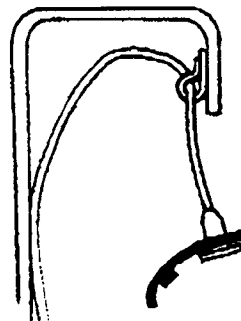
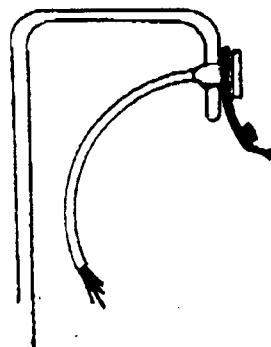
Look inside the swivel base top and make sure that the large white plastic washer is snapped in place. The notch on the washer should be lined up with the oval access hole on the swivel base top.

Carefully place the swivel base top onto the brass shaft, and secure with the lock nut and hardware. (Use the exploded view as a guide for correct installation of lock nut hardware.) Check that the 622 Adjustable Base is operating properly by pushing the adjustable ring counter-clockwise until reaching a positive stop. Holding that position, the swivel base top should rotate easily and quietly. Release the adjusting ring to return it to the locked position.

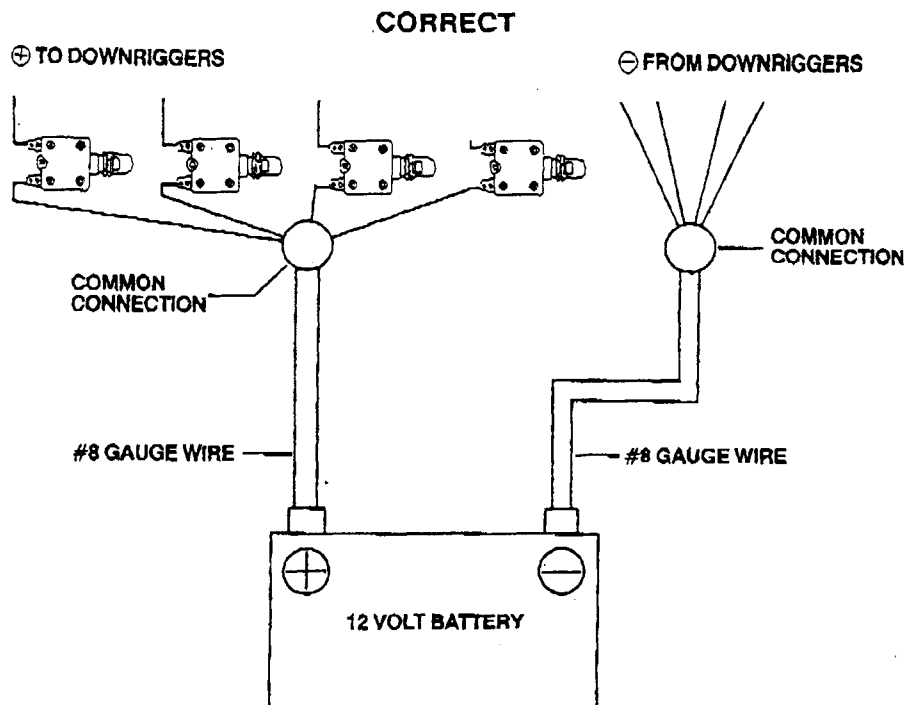
Before re-installing the swivel base cover and base plate, coat the base mounting screw threads and base plate nut threads with waterproof grease. When re-installing hardware, secure tightly, but be sure not to over tighten.

ELECTRICAL INSTALLATION FOR #800 AND #825

1. The lower power cord (#9) can be mounted flush or can be left hanging loose. If mounted flush, drill a 1" (25.40mm) diameter hole. Use #8 round head or pan head bolts or screws. Do not use flat head bolts or screws, as they will distort the rubber socket. If using an #825 downrigger be sure that the power outlet cord is located so that there is enough slack cable to allow a 180 degree swivel.



2. To connect the downrigger to the battery use #10 gauge stranded copper wire or a larger size. The next larger size would be #8 gauge. The purpose of using heavy gauge wire is to avoid voltage drop. The more voltage reaching the motor means a quicker retrieve of the trolling weight. The longer the distance the battery is from the downrigger (actual wire length), the greater the voltage drop. If a smaller wire than #10 gauge is used, the downrigger will give sluggish performance and the motor and electronics can be damaged. The



MAINTENANCE

EXTERNAL MAINTENANCE

Your Fathom-Master® electric downrigger is constructed of the most durable materials available and carefully assembled in the quality tradition of Penn Reel products.

Periodic servicing will assure trouble-free use and long product life.

1. After each day of use, *especially after salt water fishing*, the downrigger should be thoroughly washed off with fresh water. All of the exposed metal parts, boom, boom tip and especially the cable should be washed down thoroughly.

Suggestion: Use a fine gentle spray of fresh water to wash down your downrigger. Avoid forcing water into housing and damaging electrical components.

2. The prongs and sockets on the power cord and outlet cord should be washed off. After the prongs and sockets have dried off, spray some anti-corrosion oil on them and snap on the rubber cap.

3. If you lock your downrigger to the base, be sure to lubricate the bicycle lock every few weeks.

4. The switch and circuit breaker boots should be checked that they are not cracked or torn. If they are damaged, water will enter into the switch or circuit breaker; replace immediately.

Note: If the switch or circuit breaker is water damaged the warranty is void.

5. The boom pulley and swivel assembly friction areas should be sprayed with anti-corrosion oil every few weeks.

6. The threaded portion of the hold-down knob (59) should be sprayed with anti-corrosion oil every few weeks.

7. Twice a year, before and after the fishing season, remove the boom screws (remove and replace one at a time) and coat the threads with waterproof grease. Put a light film of waterproof grease underneath the cable guide when you grease the boom stud screw.

8. Should your drag washers need replacement, disassemble drag by following the exploded view of drag components on page 13. By removing the retaining ring (53) the star drag spacer (52) and drag control knob (51), you will have access to the drag washers. Normally only the drag washers themselves (48) will need replacement; be sure to re-assemble the drag system DRY. Do not lubricate, as Penn's drag system operates on a friction principle. To lubricate the drag would be like oiling the brakes on your car!

9. Occasionally remove the spool to expose the counter gears (23,26) and lightly lubricate the gear teeth with Penn's Lube or Blue Grease.

10. Occasionally lubricate the ratchet sleeve (21) on the outside only where the spool rotates (see page 12). Also lubricate the threads and two flat surfaces on the sleeve. A thin film of lubrication is best, and remember not to over lubricate.

INTERNAL LUBRICATION

The motor, gears and other internal parts on your Fathom-Master® Electric downrigger have been lubed at the factory and require no additional lubrication.

The worm gear drive has been lubricated at the factory with a special high temperature, extreme pressure lubricant and should not require changing. The only reason to relubricate the gear box would be because of leakage from shaft seals (98) (98A). Penn recommends that any re-lubrication or repairs of the gear box be performed at a Penn service center or at the Penn factory.

HOW TO USE YOUR FATHOM-MASTER® 800/825 ELECTRIC DOWNRIGGER

PRE-TRIP CHECKOUT

Before each trip, check the overall operating condition of your electric downrigger. Make sure all screws are tight and moving parts are lubricated.

Pay particular attention to the condition of the cable, especially near the end. This is where 95 percent of the cable breaks occur.

If cable is kinked or frayed, remove that section and re-rig cable hardware. Kinks result in weakened cable and frays will never get better; if not promptly remedied, both conditions will eventually lead to a lost trolling weight.

Closely examine the condition of your cable hardware (snap swivel, thimble, sleeves, sleeve guard, etc.). Make sure that the sleeves are firmly crimped on the cable and there's no fraying around the sleeves. A chain is only as strong as its weakest link; the same is true with your downrigger cable. The weakest link in this case is your crimp connection, so we cannot over-emphasize the importance of frequently checking your crimps.

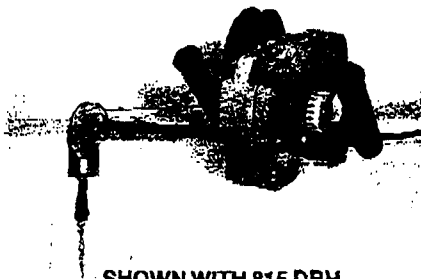
Penn strongly recommends that you use the Fathom-Master® replacement crimps (213-24SP, see accessories page) when it's time to re-rig your crimp sleeves. Don't be penny-wise and 10 lb. weight foolish; replace crimp sleeves often.

TO THE FISHING GROUNDS

If you anticipate a long run or rough seas on the way out, you may want to consider keeping the units stowed until you reach the fishing area. Or you may prefer to mount your electric downrigger before you are under way.

Either way, begin by sliding the electric downrigger on to its base by pushing the unit until it hits the base's raised ridge. Then turn the hold-down knob clockwise until it catches the nut in the base plate. Tighten until hand tight. Be careful not to overtighten, because it may be hard to loosen the hold down knob later. However, *make absolutely sure* the hold down knob is tightened securely by hand. If you

merely slide the unit in place and forget to tighten the knob, the electric downrigger could slide off its base while you are under way and you could lose the unit overboard. Remember, check your hold-down knob!



SHOWN WITH 815 DRH

Either keep your trolling weights stowed until you are ready for deep trolling or if you prefer, attach the trolling-weight to the cable hardware's snap swivel. Loosen the drag and place the trolling weight on the cockpit deck to prevent it from falling any farther.

Whether you head out for the fishing grounds with or without the trolling weight attached to the unit, always keep sufficient drag tension to prevent the weight from rolling or the cable from coming off.

PENN'S FATHOM-TROL® CANNONBALL WEIGHTS (10W AND 5W) FEATURE A FLAT BOTTOM TO RESIST ROLLING. SEE ACCESSORIES PAGE FOR MORE FEATURES AND DETAILS ON PENN'S FATHOM-TROL® WEIGHTS.

Do not attempt to mount the electric downrigger with the weight already on the unit. Damage to the hold down knob can occur, and besides, mounting a downrigger with a weight is just too unwieldy; you may lose everything overboard. Take your time and take it easy.

If you are traveling with your electric downriggers already mounted, remember to provide extra clearance for the booms when docking, trailering, etc.

SETTING UP

When you are ready to go deep trolling with your electric Fathom-Master®, connect the power cord and hold the attached trolling weight near the boom tip. (If you have an 825, swing the boom inboard to rig up the weight. If you have an 800, you can just reach overboard to rig up the weight.) Make sure the cable is not fouled and wind in any slack cable.

Tighten the drag to make sure there's sufficient tension to prevent the accidental descending of the trolling weight.

Pay out the desired length of line/lure from your fishing reel; then attach the fishing line to the trolling weight's release mechanism.

The fishing reel should be in free spool with the click engaged or the spool can be kept engaged with a very light drag setting. Both actions will prevent the reel's spool from overrunning while the weight/lure is descending.

The length of fishing line let out, leader length, lures, attractors, trolling depth, etc. will vary with different locales and fish species. Since this is local information, check with area tackle shops and fishermen for advice.

Penn's 10 lb. and 5 lb. trolling weights are general standard and light weights respectively. Weights heavier than 10 lbs. may be used on Penn's Fathom-Master® electric downriggers, but they should not exceed 14 lbs.

LOWERING WEIGHT/LURE

To lower the weight/lure, push the three way up/off/down toggle switch to "down". While the weight/lure is descending, check that the fishing line, cable, etc., is paying out smoothly and that there are no tangles. If there are any tangles, stop the descent immediately, and correct the situation.

Once you reach the desired depth, stop the descent by pushing the switch to "off". A special feature on Penn's Electric Fathom-Master® downrigger prevents you from going in the "down" mode right into the "up" mode, or vice versa, by use of a special neutral or "off" switch. Whether you're going from "down"

the hesitation prevents the motor and gears from turning. This special hesitation feature in the "off" switch prevents the operator of the Electric Fathom-Master® from instantly switching modes and possibly damaging the motor, gears and other internal parts. The "off" mode cuts electricity off to the unit and is the mode to use for storage when the electric downrigger is not being actively used.

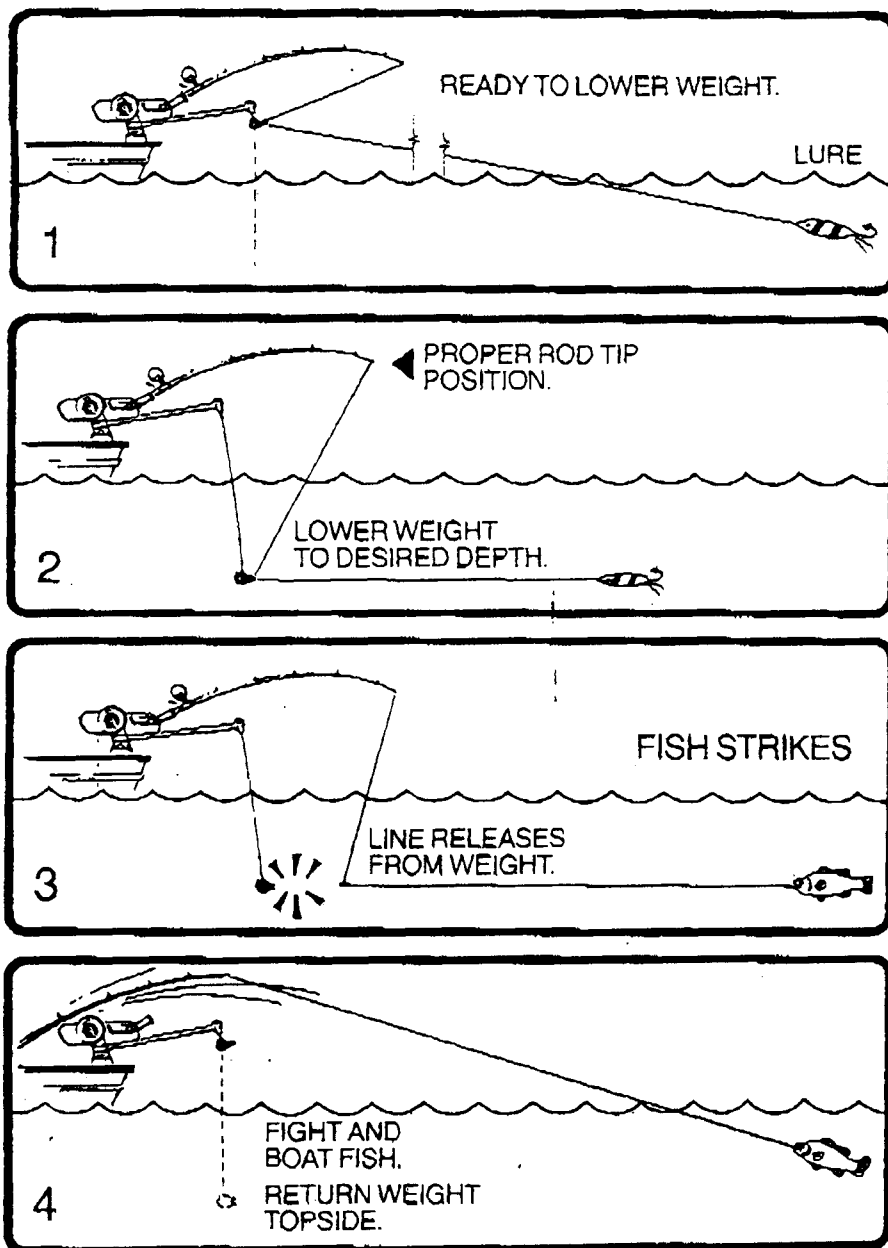
You can also lower the weight/lure manually by releasing the tension on the drag knob. Slowly turn the drag knob counter-clockwise for less tension, clockwise for more tension. When you reach the desired depth, stop the descent by increasing the drag tension. Just use sufficient drag to keep the downrigger's spool from turning while trolling. Wind excess line back onto the fishing reel until the rod tip bows downward.

Never keep the drag knob too tight while deep trolling with the electric downrigger. The Fathom-Master® drag operates much the same as the drag on a fishing reel. If the trolling weight should snag on the bottom or some obstruction, the drag will slip and pay out cable. This allows the boat operator time to stop the boat and retrieve the trolling weight.

If you snag with an overtight drag, you could break the cable or damage the boom or electric downrigger unit. Keep an eye on the red dots on the downrigger spool; their purpose is to verify that the downrigger spool is not moving while deep trolling. If it is, you're snagged on to something!

The boat operator must employ the same tricks as a fisherman with a snagged lure when trying to remove a snagged trolling weight. Usually a gentle turn of the boat and a pull in the opposite direction (or going in reverse if cable clearance is adequate) will retrieve the weight. Raise other downrigger weights before trying to remove the snag.

Being gentle and exercising finesse while trying to fish out a snagged weight will do more than brute force. Never use the electric switch to try retrieving the trolling



weight. Such abuse will void the warranty should any problems with the electric downrigger occur.

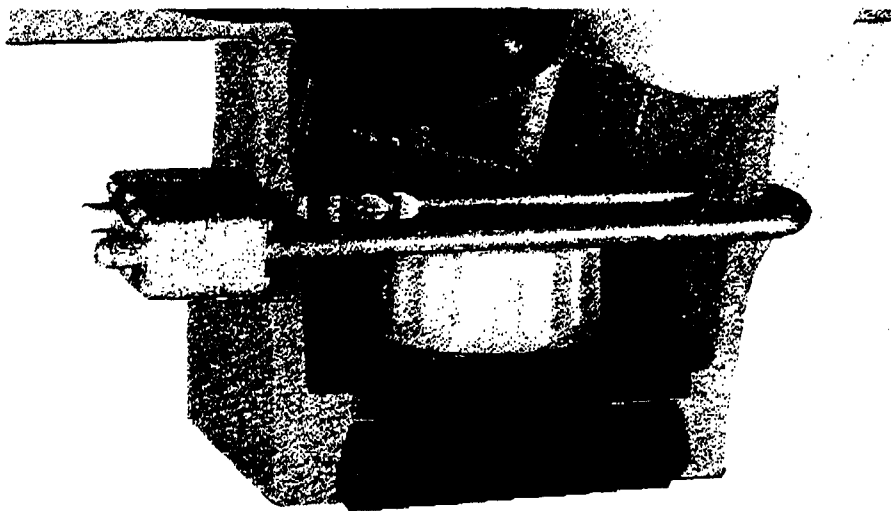
Instead, grab the cable with your hand and try working the weight loose. Do not wrap the cable in your hand, as injury may result. Should the boat lurch, let go instantly and let the Fathom-Master® drag pay out additional cable.

Fishing out a snagged weight is usually not much of a problem if you're calm and systematic and everyone on the boat operates as a team.

Penn recommends raising the weight by manually turning the spool once the weight is free of the snag,

just in case you're not really free of the snag or you wind up bringing part of the bottom up with the weight! Turn the spool hand-over-hand until the weight is topside. Be sure to carefully check the cable, weight and hardware before you resume deep trolling.

When a fish strikes, the rod will dip up, because the fish has tripped the trolling weight's release mechanism and released the rod's downward bow. Remember to put the fishing reel in gear or tighten up the fishing reel's drag if necessary. Also, pushing the clicker off will save wear on the reel's clicker.



If you choose to leave your Electric Fathom-Master® unattended on your boat, you can insert a bicycle-type lock through the frame, as shown above, to help prevent theft.

DEEP TROLLING

Instructions on adjusting the trolling weight's release mechanism should be included with the weight or release. Penn's Fathom-Trol® weights feature a spring loaded release mechanism that adjusts for all kinds of deep trolling conditions, from lake trolling for trout to ocean trolling for giant tuna. Usually a release is too loose when you get a "false" trip: the release trips, but there's no fish on. The release is too tight if your line breaks after a large fish strikes, or if you're dragging and "drowning" small fish after the strike.

That's one reason to frequently check your lures while deep trolling. You should also be checking to make sure lures are not fouled, that they are swimming properly, the leader's not fouled, etc.

Once a fish strikes and trips the release, simply push the electric downrigger's switch to "up". The trolling weight will rise to the surface. Where it will stop depends on where you program the adjustable automatic shut-off.

Located on the side of the counter cup, the Electric Fathom-Master's® automatic shut-off adjusts from the boom tip down to 20 feet. In other words, you could adjust this shut-off to stop the retrieve of the weight at 20, 10, 5 feet down, etc., and anywhere in between.

There are several advantages to this automatic shut-off feature. If you are using more than one line (and release) off one downrigger, called "stacking" two or even three lines, you could program your weight to stop its ascent at a maximum of 20 feet deep. Then you could "jog" the weight up until you reach the next release, etc., until the weight is finally topside.

If you are using a release above the trolling weight instead of on the release itself, you could adjust the shut-off so the release is topside, ready for re-rigging, but the weight is still in the water. Actually Penn recommends stopping the weight's ascent when the trolling weight is still in the water, perhaps a foot or two deep, no matter where your release is located. Try to keep the trolling weight from swinging off the boom tip while you are re-rigging, fighting a fish, etc., because a swinging weight is murder on the finish of your boat's hull. Besides that, a swinging weight will also twist and turn, which helps weaken your cable hardware connection.

Adjust your counter cup so that when the sleeve guard on the cable hardware is just below the boom tip, the counter reads zero (0). The Fathom-Master® counter system is easy to adjust: merely turn the cup with your hand in the proper direc-

tion. Because it is gear-driven, the counter cup is extremely accurate for showing the amount of cable you have out from your boom tip.

Determining the depth of your trolling weight, unless you can pick it up on your recorder, is an educated guess, because you have to take into account the angle of the cable while deep trolling. Sometimes the length of cable from your boom tip to the water's surface will cancel out the two or three-foot rise of the weight caused by the angle of the cable. Most of the time your approximation of the depth of your trolling weight will be in the "ball park", and experience will make you more accurate in your estimations. Still exercise caution, though, when you are trolling close to the bottom of structure.

To adjust the automatic shut off, first turn the adjusting screw, located in the counter cup's slot, counter-clockwise. Now you can move the adjusting screw up or down along the slot to correspond to the depth indicated on the counter cup. Simply match the screw to the depth where you want the weight to stop its ascent. Tighten by turning the screw clockwise, but do not over-tighten.

Once your weight is topside, you may want to "jog" it up to the boom tip (by working the "up" switch) for re-rigging the weight. If you do jog the weight up to the boom tip, be sure to shut the power off when the cable hardware is about a foot or so away from the boom tip. If you jog the weight right up to the boom tip, you'll stall out the motor or activate the Fathom-Master drag, if the drag is set properly. If the weight accidentally comes right up to the boom tip, the lesser of two evils is to keep your drag adjusted properly. With a drag that's too tight, even though the motor will stall out when the weight comes right up to the boom tip, there's always the chance that the cable will break. Certainly jamming the cable hardware up against the boom tip with a tight drag will do your cable, cable hardware or electric downrigger no good. Always remember to keep your drag properly set so it will slip under resistance.

AFTER THE TRIP

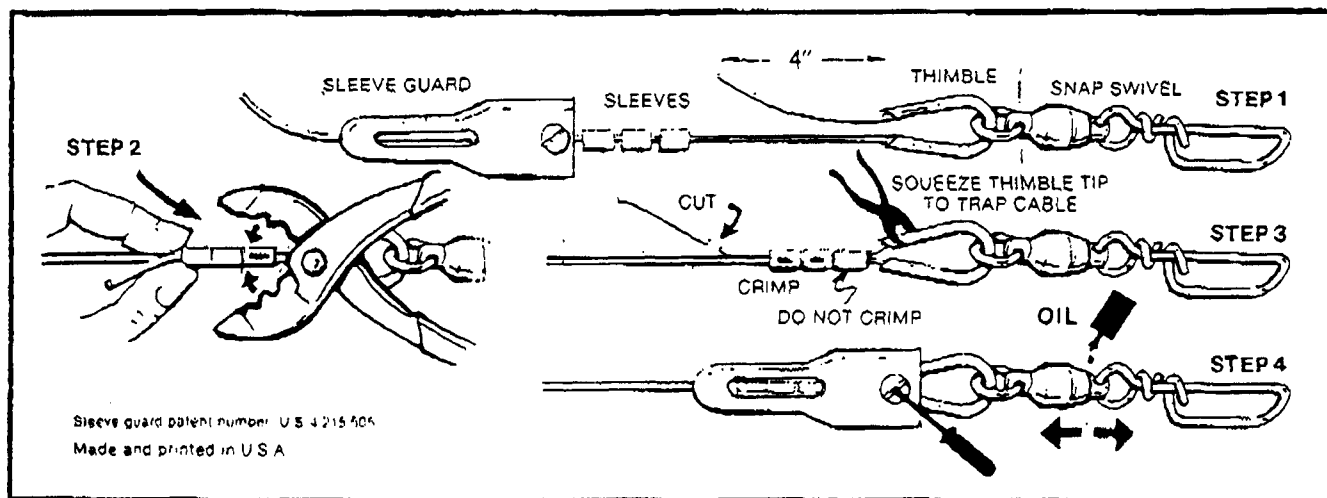
Follow the same precautions outlined in "Pre-Trip Checkout", "On the Way to the Fishing Grounds", "Setting Up", etc. Before reaching the dock or launching ramp, it's a good idea to remove the electric downrigger unit from its base so the boom or unit won't catch any pilings, bulkheads, etc.

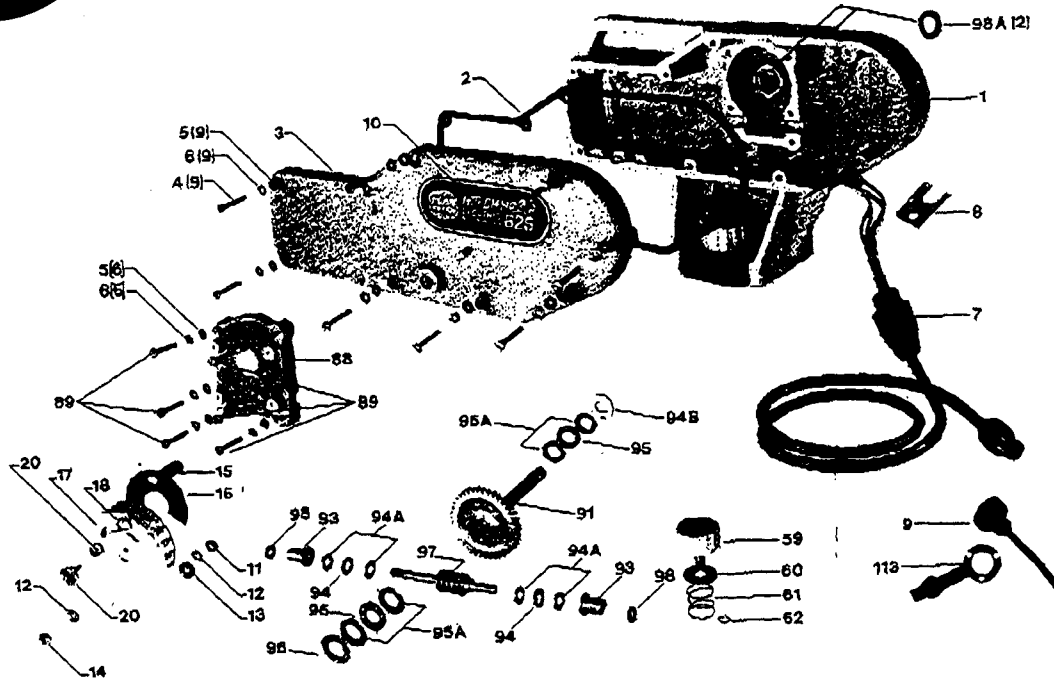
Your Fathom-Master® Electric downrigger disassembles for easy, compact longterm storage. Remove the boom screw (28), pull the boom from the unit and replace the screw. To break the boom down, remove (then replace) the lower screws holding the boom studs in place. Wind in excess cable. Insert the boom tip between the bottom of the spool and the

frame and secure the cable by looping it over the spool and trapping the cable hardware's snap through the boom screw. Wind in any excess cable and tighten the drag slightly.

Extra fixed base plates (see accessories) are great for storing your Penn Fathom-Master® Electric downriggers in safe, out-of-the way spots (basement wall, etc.).

ATTACHING CABLE HARDWARE

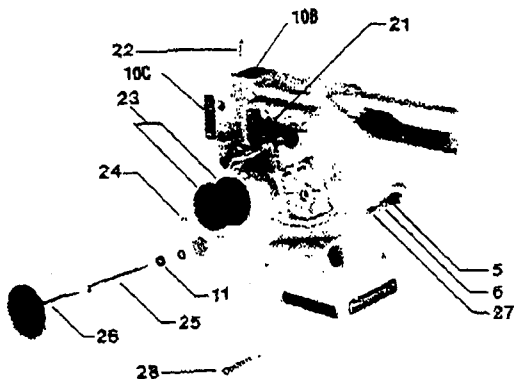




RIGHT SIDE FRAME ASSEMBLY

KEY NO.	DESCRIPTION	PART NO.
1	Frame w/Bearing & Seals	132A-800
2	Frame Gasket	264-800
3	Frame Cover	227-800
4	Cover Mounting Screw (9)	63-800
5	Rubber Washers (15)	220-800
6	Flat Washer (15)	205-800
7	Power Cable (Upper)	530-800
8	Power Cable Clip	203-800
9	Power Cable (Lower)	532-800
10	Model Number Decal (Not Shown)	216-800
10A	Model Number Decal (Not Shown)	216-825
11	Winch Diagram (Not Shown)	226-800
12	Counter Cup Shaft Seal (1)	247-800
13	Counter Cup Thrust Washer (2)	247-620
14	Counter Cup Washer	190P-600
15	Counter Cup Lock Nut	200-600
16	Magnet w/Housing	302-800
17	Counter Cup Plate	124-800
17A	Counter Cup	181-800
	Counter Cup Label	256M-600

KEY NO.	DESCRIPTION	PART NO.
18	Counter Cup Indicator	305-800
19	Compression Spring	57-109
20	Magnet Housing Knob	303-800
59	Hold Down Knob	184-600
60	Hold Down Knob Washer	206-600
61	Hold Down Knob Spring	192-600
62	Hold Down Retaining Ring	195-600
88	Gear Box Cover w/Bearing	156A-800
89	Gear Box Cover Mounting Screw (6)	63-800
91	Main Gear w/Shaft	54A-800
93	Worm Shaft Bearing (2)	44A-800
94	Retainer w/Balls-Worm Shaft (2)	253-800
94A	Worm Thrust Brg. Washer (4)	252-800
94B	Main Shaft Spacer	9-820
95	Retainer w/Balls-Main Shaft (2)	253-820
95A	Main Shaft Thrust Brg. Washer (4)	252-820
96	Tension Washer	18-970
97	Worm Shaft w/Worm & Pin	42A-800
98	Worm Shaft Seal (2)	246-800
98A	Main Shaft Seal (2)	245-800
113	Lower Power Cord Cap	531-800

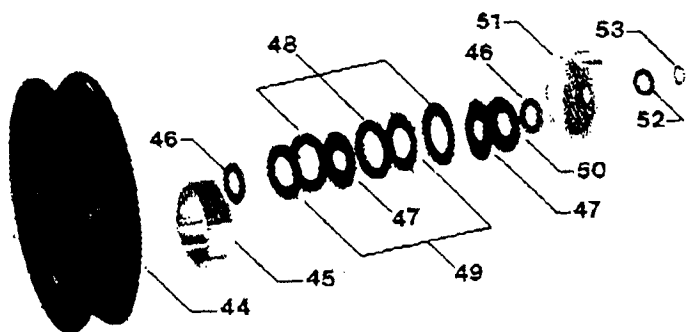


LEFT SIDE FRAME ASSEMBLY

KEY NO.	DESCRIPTION	PART NO.
5	Rubber Washer (1)	220-800
6	Flat Washer (1)	205-800
108	Frame Warning Label	225-800
10C	Switch Label	217-800
11	Counter Cup Shaft Seal (1)	247-800
21	Main Sleeve	98-800
22	Main Sleeve Pin	102-800
23	Idler Gear (2)	178-600
24	Idler Gear Retaining Ring (2)	69B-600
25	Counter Cup Shaft	188-800
26	Counter Cup Gear	179-600
27	Motor Mounting Screw	32-800
28	Boom Screw	194-600

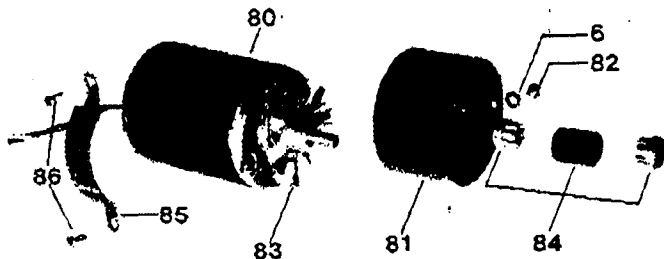


PARTS LIST FOR FATHOM-MASTER® 800-825 (CONT.)



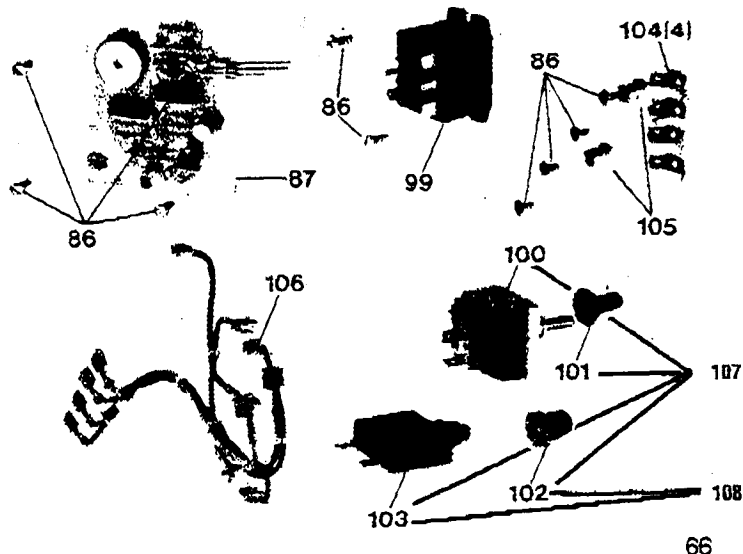
DRAG BRAKE ASSEMBLY

KEY NO.	DESCRIPTION	PART NO.
44	SPOOL	29-800
45	THERMAL INSULATOR	191-836
46	INSULATING WASHER (2)	199P-600
47	KEY WASHER (2)	86-600
48	DRAG WASHER (3)	6P-600
49	EAR WASHER (2)	7-836
50	TENSION WASHER	8-600
51	DRAG CONTROL KNOB	10-600
52	STAR DRAG SPACER	9-800
53	MAIN SHAFT RETAINING RING	196-800



ELECTRIC MOTOR ASSEMBLY

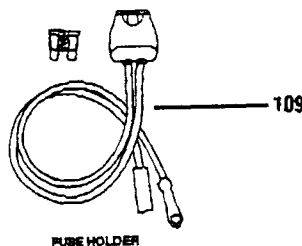
KEY NO.	DESCRIPTION	PART NO.
6	Flat Washer (1)	205-800
80	Motor	501-800
81	Motor Shroud	273-800
82	Motor Shroud Screw	31-800
83	Fan w/Set Screw	304-800
84	Motor Shaft Coupling	119-800
85	Motor Mounting Strap	270-800
86	Mounting Screw (2)	123-800



(GREY HOUSING)

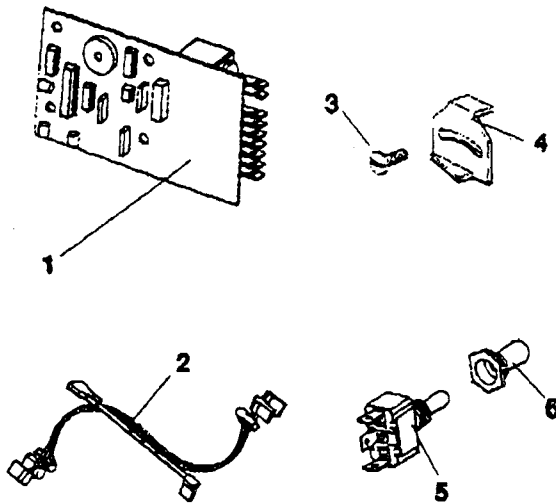
ELECTRICAL ASSEMBLY

KEY NO.	DESCRIPTION	PART NO.
86	Mounting Screw (10)	123-800
87	PC Board w/Ribbon Cable	507-800
99	Power Relay	502-800
100	Switch	503-800
101	Switch Boot	504-800
102	Fuse Boot	505-800
103	Breaker	506-800
104	45° Terminal (4)	512-800
105	90° Terminal (4)	513-800
106	Harness	515-800
107	Remote Control Kit	520-800SPD
108	Circuit Breaker w/Boot	506-800SPD
109	Fuse Holder	533-800SPD



NEW PARTS LIST FOR FATHOM-MASTER® 800/825 (BLACK HOUSING)

(Parts listed below are unique to the 800/825 models. See owner's manual for other parts.)



KEY NO.	DESCRIPTION	PART NO.
1	PC Board	507-825
2	Harness	515-825
3	Mounting Screw	63-349
4	Lid Pointer	305-825
5	Switch	503-825
6	Switch Boot	504-800

Please refer to the back cover of your owner's manual for warranty description and how to order replacement parts.

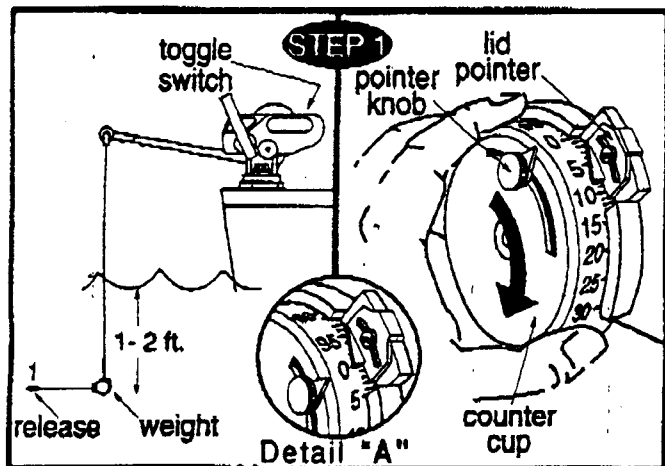
NOTE: Discontinue use of the unit if the switch or circuit breaker is water damaged. Continued use may cause further damage and will void warranty.

**PENN FISHING TACKLE MFG. CO.
3028 W. HUNTING PARK AVE.
PHILADELPHIA, PA 19132
MADE IN U.S.A.**

HOW USE YOUR FATHOM-MASTER® 800-825 DOWNRIGGER

COUNTER SET-UP AND SWITCH OPERATION

- Fishing With A Single Line Release -



Push toggle switch to DOWN position to lower the weight about 1-2 ft. below water level (refer to step 1). Push switch in the opposite direction to STOP the weight.

REMEMBER, whether you're raising or lowering the weight, to STOP, push the switch in the opposite direction. The switch is spring loaded and will return to the center position after you push it in either direction.

Now that the trolling weight is resting 1-2 ft. below the water level, grasp the counter cup and rotate it clockwise until the "0" lines up with the frame lid pointer. (refer to Detail "A")

FOR "STACKING" SKIP TO STEP 2

You are now ready to begin trolling. Lower the weight/release (push toggle switch DOWN) to reach the desired depth by referring to the counter cup reading. Remember to push the switch in the opposite direction for it to STOP. Practice, lowering and raising the weight/release a few times. When raising the weight/release, it will automatically stop at "0" ft. mark. (1-2 ft. below water level). A short "beep" will sound.

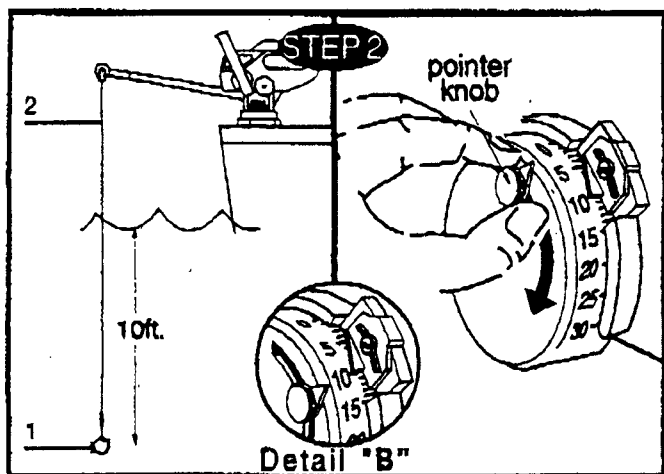
Raise the weight/release out of the water up to the boom-tip for re-rigging by "Jogging" it.

To "Jog" the weight/release up, push the toggle switch UP and RELEASE. "Jog" in small increments to prevent the weight from accidentally slamming into the boom-tip.

NOTE: The "jog" feature (push switch & release) operates ONLY when the weight/release is going up, only after the counter passes the "0" ft. mark.

- Fishing With Multiple Line Releases "Stacking"-

Follow step 1 of lowering the weight/release #1 to 1-2 ft. below water level, and turning counter cup clockwise to re-set to "0" ft.



Then lower weight/release #1 down to 10 ft.

Attach your release #2.

To set the Automatic Stop (which prevents the weight and releases from slamming into the boom-tip!)

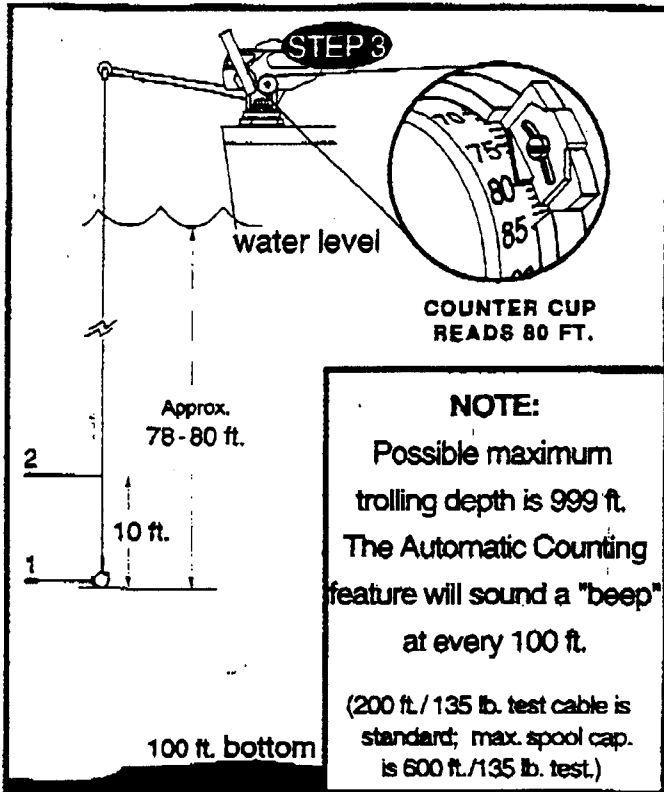
Unscrew the counter cup pointer knob slightly and slide it along until it matches the 10 ft. reading on the counter cup (refer to Detail "B"). A "beep" will sound.

Do not unscrew the knob too much, because the pointer will fall out of place.

Retighten knob.

You are now ready to begin trolling!

- Fishing With Multiple Line Releases (continued) -



Lower releases, lines, and weight to desired depth, referring to the counter cup reading. (example-80 ft.)

After a strike or to raise releases and weight up to water level, push switch UP.

Release #2 will automatically stop as shown in step 2, just below the boom-tip, ready for re-rigging. A "beep" will sound.

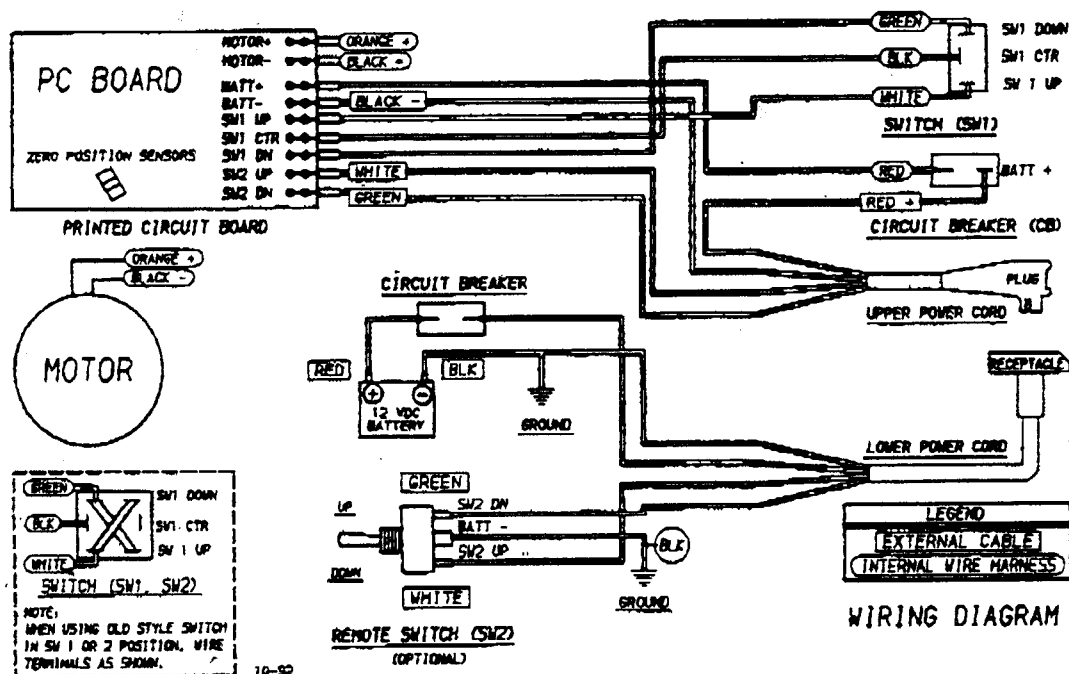
At the same time, release #1/weight will be 10 ft. below the water level, as shown in step 2.

You must remove release #2 and "jog" release #1 and weight up the rest of the way for re-rigging.

Before attaching your fishing line to the releases, practice lowering and raising the weight a few times.
Good Downrigger Fishing!

ELECTRICAL INSTALLATION FATHOM-MASTER® 800-825 DOWNRIGGER

(BLACK HOUSING)

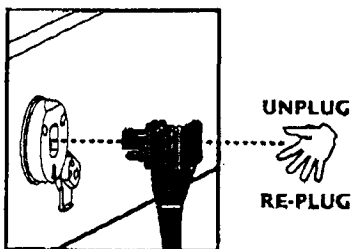


SETTING/CLEARING DEPTH WAYPOINTS (CONT.)



SET BUTTON

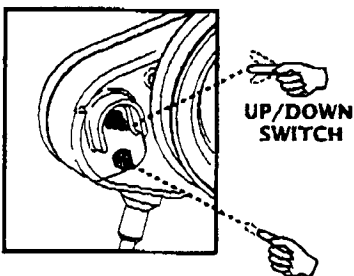
To clear waypoints, lower or raise downrigger weight to waypoint you want to clear. You'll hear one short beep, indicating weight has reached waypoint. Push set button, then release. You'll then hear two short beeps, indicating waypoint has cleared.



UNPLUG

RE-PLUG

A quick way to clear all waypoints, including zero/rigging point, is to unplug and re-plug unit. If you do, set your zero/rigging point as detailed above.



UP/DOWN SWITCH

SET BUTTON

Another way to clear all waypoints, and to quickly re-set zero/rigging point, is to raise weight to zero point and after one long continuous beep, push up/down switch to up position. Then push set button in, and keeping it depressed, push up/down switch to up position. Release and then push set button again, and you'll hear three short beeps, indicating re-set zero/rigging point. Remember, all other depth waypoints are cleared, so you'll need to re-set any you want.

To activate manual or "jog" mode, push and keep depressed set button in, push up/down switch to up position. Weight can be any depth. Toggle up or down, but you'll need to keep your finger on switch to raise or lower weight. To stop weight's descent or ascent, take your finger off switch. No beeper sounds in this mode. Also, all waypoints including zero/rigging waypoint are wiped out and you cannot set any waypoints. To exit, follow instructions for re-setting your zero/rigging waypoint.

ACTION

RESULT

PUSH UP/DOWN SWITCH (UP)	WEIGHT RISES
PUSH UP/DOWN SWITCH (DOWN)	WEIGHT DESCENDS
PUSH UP/DOWN SWITCH (OPPOSITE DIRECTION)	WEIGHT STOPS
PUSH & RELEASE SET BUTTON	SET WAYPOINT
PUSH & RELEASE SET BUTTON (AGAIN)	CLEAR WAYPOINT
UNPLUG & RE-PLUG UNIT	CLEAR ALL WAYPOINTS
PUSH AND HOLD SET BUTTON (IN) & PUSH UP/DOWN SWITCH (UP)	JOG/MANUAL MODE ACTIVATED

REVIEW OF BEEPER SOUNDS

- One short **BEEP** indicates waypoint is set.
- Two short **BEEPS** indicate waypoint is cleared.
- Three short **BEEPS** indicate power going to unit or new zero/rigging point is re-set.
- One long continuous **BEEP** indicates weight has reached zero/rigging point.

WARRANTY

LIMITED WARRANTY

Penn Fishing Tackle Mfg. Co. warrants your Fathom-Master[®] downrigger to be free from defects for a period of one year from the date of purchase. This warranty does not cover damage or malfunctions caused by accident, abuse or normal expected wear.

If your downrigger has a defect within terms of the warranty, you should return it to us insured at the address below. Be sure to include a note explaining the problem and a copy of the dated sales receipt from the store where you purchased the unit. *To avoid error be sure that your name, address and note is clearly and neatly written.* Please include your telephone number and area code. Unless the boom is in question, there is no need to return the boom with the unit. This will make shipping easier.

We will repair or replace your Fathom-Master[®] downrigger, at our option, without further cost to you. If, however, we determine after inspection that the repair is not covered by provisions of this warranty, we will notify you. Upon your instructions we will return your downrigger, (postage must be prepaid) or repair your downrigger. If you choose to have your downrigger repaired, it will be returned to you at a reasonable charge for parts, labor and return postage. The repair costs and postage must be prepaid.

Loss of trolling weight, cable, snap swivel and related items is not covered by warranty. Spool breakage due to use of monofilament line on downrigger spool is not covered by warranty. Using the downrigger for commercial fishing will void the warranty. Exercise reasonable care and caution while operating your Fathom-Master[®] downrigger and follow the instructions in this owner's manual to avoid the above situations.

ALL WARRANTIES WHICH MAY BE IMPLIED BY OPERATION OF LAW, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE, SHALL BE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. IN NO EVENT SHALL PENN FISHING TACKLE MFG. CO. BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES FOR BREACH OF THIS WARRANTY OR ANY OTHER WARRANTY WHICH MAY BE IMPLIED BY LAW.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, AND SOME STATES DO NOT ALLOW THE EXCLUSION OF CONSEQUENTIAL OR SPECIAL DAMAGES, SO THE ABOVE LIMITATION AND/OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

IF SERVICE IS REQUIRED AFTER WARRANTY EXPIRES

Your local Penn dealer can provide fast and convenient service for your Fathom-Master[®] downrigger. You may also return it to Penn for service at the address below. Send it insured and include a short note stating what needs servicing. *To avoid error, make sure that your name and address appear neatly and clearly on both your note and outside the package.* Unless the boom needs servicing, do not send it with the unit. Doing that will make shipping easier. Penn will notify you of the repair costs and shipping charge. Send in your remittance for your downrigger to be repaired. (Do not send cash.) You can also request MasterCard or Visa payment. Please provide card type, name on the card, account number, expiration date and daytime telephone number, when sending in your downrigger. Allow three to six weeks, depending upon the season, before your downrigger is returned.

HOW TO ORDER FATHOM-MASTER[®] DOWNRIGGER PARTS

1. State model for which parts are intended.
2. Order parts by name and number.
3. An invoice will then be sent to you showing part prices plus shipping and handling charges.
4. Send in your remittance to receive your parts order (do not send cash).
5. For faster service, see a local Penn dealer. If he does not have the parts you need, he can order them for you.
6. Minimum cost for factory parts order is \$2.00 (plus \$2.00 for processing). Minimum charge for MasterCard or Visa orders is \$4.00. Please provide card type, name on the card, account number, expiration date and daytime telephone number.
7. For telephone parts orders, call Philadelphia at (215) 229-9415.

Note: Please write your name, address and parts order clearly and neatly, to avoid error.


PENN FISHING TACKLE MFG. CO.
Fathom-Master[®] Department
3028 W. Hunting Park Ave.
Philadelphia, PA 19132

Penn Fishing Tackle Mfg. Co. reserves the right to discontinue models and make changes in prices or specifications without notice. Penn's policy of ongoing research may necessitate design changes to bring about a product improvement.

**PENN REELS[®] FATHOM-MASTER[®] SWIVEL-MATIC[®]
AND FATHOM-TROL[®] ARE REGISTERED NAMES OF
PENN FISHING TACKLE MFG. CO.**

**PATENT NOS. 3,967,405-3,961,438-3,974,589-OTHER PATENTS PENDING
MADE AND PRINTED IN U.S.A.**

www.PENNparts.com

 **Scott's Bait & Tackle**

**Penn Parts Dept.
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that Penn doesn't
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