



WaveEater™

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PROCEDURE FOR INSTALLING WaveEater™

1. Parts included - #3636 *WaveEater™*
 - ½" Nylon Jacketed Cable
 - ½" Thimbles
 - ½" Wire Rope Clips
 - 7/16" Bow Shackles
 - Spacers
 - 1" Poly Hose
 - 2" PVC Threaded Plugs
 - ¾" Nylon Drain Plugs, (when necessary)
 - 1/2" Eye-Eye Swivel Shackles
 - 3/8" Galvanized Chain
 - Anchor Chain Buoys

2. Tools required -
 - Utility Knife
 - Portable Impact Wrench
 - Portable "Trash" Pump, (1-1/2" minimum for filling units)
 - Range Finder, (to properly set anchors)
 - Portable propane torch
 - Riggers Vice
 - Hydraulic Wire Rope Cutter
 - Miscellaneous tools as required

3. Cast concrete anchors, minimum 1200lbs, (530kg). Cast concrete shock absorbers minimum 50lbs, (22kg).

4. **Refer to "Anchor System Detail".**

After casting anchors attach 3/8" chain using a 7/16" bow shackle. (Overall chain length should be twice the water depth).

Attach concrete shock absorber to chain approximately 10' from main anchor. (In water depths of less than 10' attach absorber at a distance equal to ½ the water depth.)

Note: when setting anchors it is advised that a range finder be used for accurate placement.

5. Attach chain anchor buoy using one (1) 7/16" bow shackle as shown on drawing.

Assembly of WaveEater Units

1. Cable Installation: Determine what length is required between mooring anchors.
Leave a sufficient amount of cable length to allow for thimble splice and wire rope clips, (min. 15” each end for Straight Line installations, 30” for Sawtooth and 60” for Grid installations).
- Note:** **Proper cable splicing requires that “bare” cable be wrapped and clipped around thimble.**

2. Cut Cable A small hydraulic wire rope cutter is the easiest way to cut the ½” cable. You will also want a rigger’s vice or similar tool to clamp the wire rope to the thimble while you attach wire rope clips. (Figure 1).

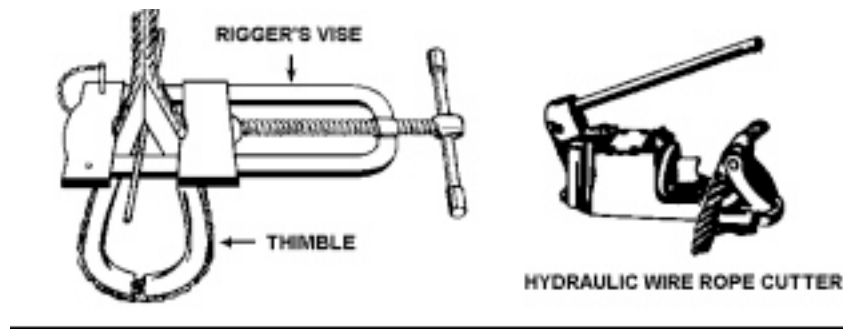


Figure 1

2. Stripping Nylon Jacket To expose the bare cable you will need a Utility Knife and portable Propane Torch. If you examine the cable one side of the coating is actually thinner than the other. Measure the appropriate distance to be stripped. Using the torch run the flame back and forth until you see the nylon start to soften. Using the Utility Knife cut lengthwise along the heated section. Peel back the jacket and cut from cable.
3. Splicing Cable Slide wire rope clips onto the cable. Using a Rigger’s vice, (fig 1) or other clamping device, clamp cable around thimble.(See Figure 2 for correct assembly).
Tighten wire rope clip nuts using a portable impact wrench.

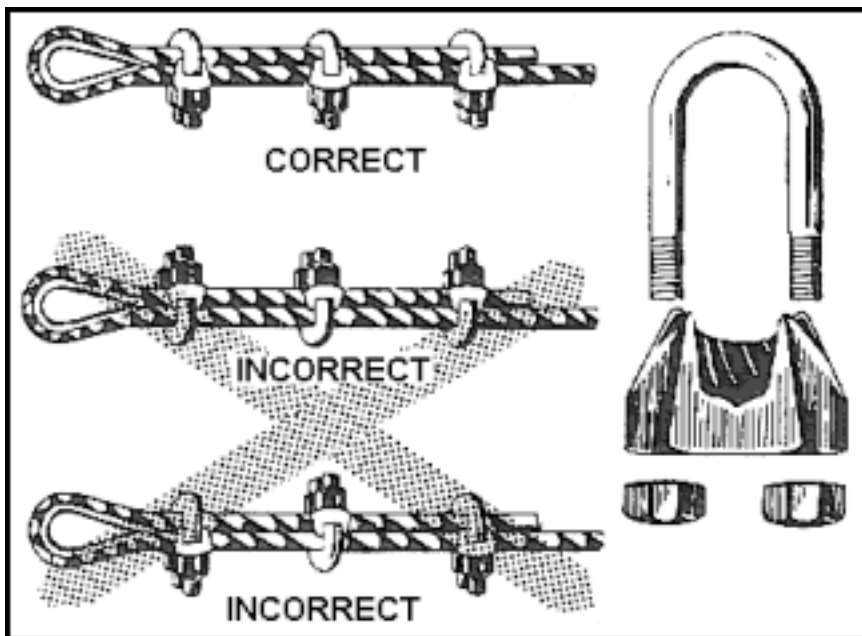


Figure 2

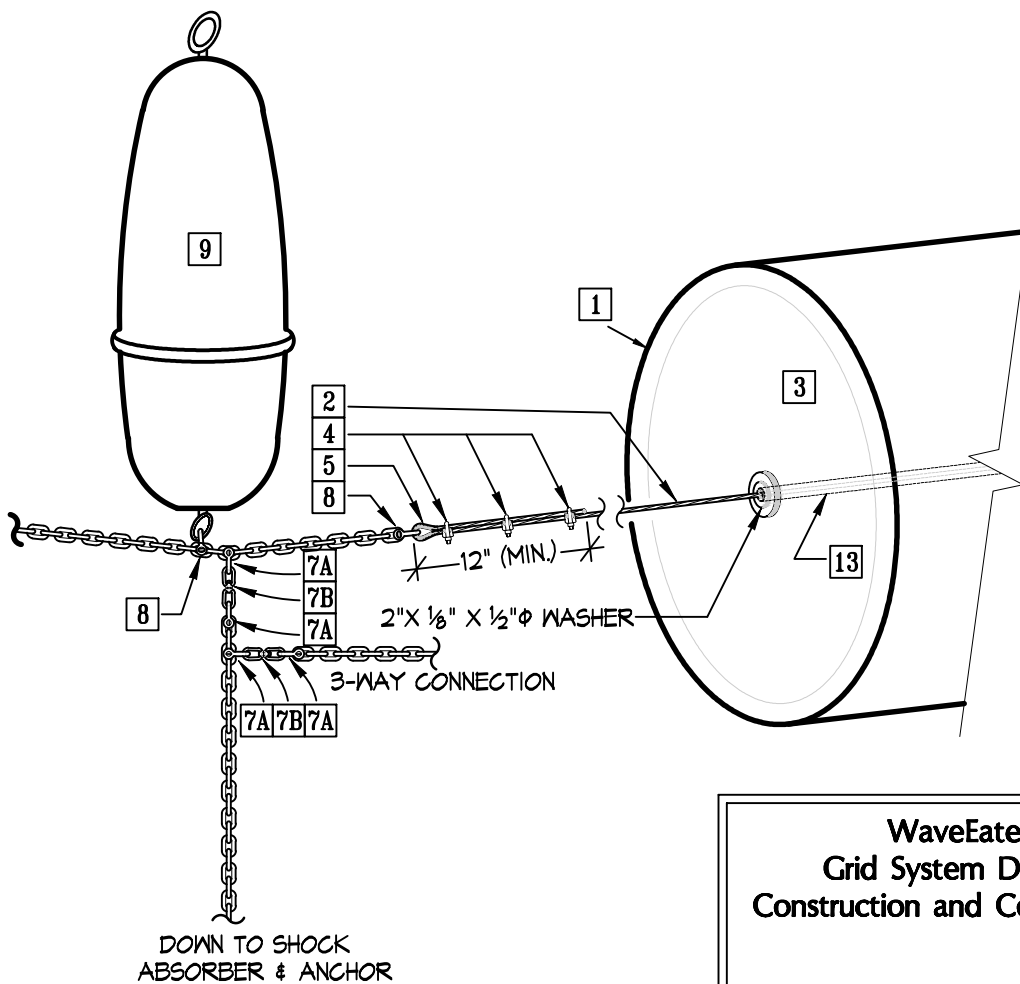
4. PolyPipe Insert a length of PolyPipe through the total number of units that will be included in any one (1) section. Due to the pipe being shipped in coils it likely will only go through four (4) units at a time and will have to be “fed” through the rest.
5. Cable Installation Feed “raw” end of cable through metal washer, then Delrin spacer, then through 1” PolyPipe. On the opposite end attach Delrin spacer, then metal washer and attach thimble and wire rope clips as shown in Figure 2. (Refer also to “Anchor System Detail”).
6. Placement Tow WaveEater section into place. Attach thimbles to anchor chains as shown in the “Anchor System Detail” drawing. Using a portable “Trash” pump fill the units until they are submerged by two-thirds, (24” or 69cm). The fill hole is 2in/5cm. Screw in 2in/5cm PVC threaded plug.

Installation is now complete.

MAINTENANCE: Within several days of installation wire rope clips should be checked for snugness. Under normal conditions clips will “seat” after a short time and require tightening. Generally this result will be from tightening with a hand wrench. A portable impact wrench will eliminate this requirement.

BILL OF MATERIALS

ITEM	QTY	PART #	DESCRIPTION	REMARKS
1	TBD	WE-3636	36" X 36" WAVE EATER	
2	TBD	C58CCN	1/2" - 7 X 19 NYLON JACKETED CABLE	
3	TBD	CG-0350	3.5" DELRIN SPACERS	WEAR PLATE FOR SPLICED CABLE
4	TBD	SD-158512	1/2" WIRE ROPE CLIP	USE 3 AT EVERY CABLE SPLICE; PLACE "LIVE CABLE END IN ROPE CLIP SADDLE
5	TBD	SD-170012	1/2" THIMBLE	USE 1 AT EVERY CABLE SPLICE
7A	TBD	SD-147611	7/16" ANCHOR SHACKLE	ANCHOR POINTS & 3-WAY CONNECTIONS
7B	TBD	SD-181112	1/2" EYE & EYE SWIVEL	ANCHOR POINTS & 3-WAY CONNECTIONS
8	TBD	SD-147611	7/16" SHACKLE	CONNECTOR FROM CHAIN TO ANCHOR
9	TBD	#423-0	MOORING BUOY AT ANCHOR CHAIN	WITH 13 (EA) 7/16" SHACKLES
13	1200		1" POLY PIPE	RUN THROUGH CENTER OF WAVE EATERS AS BEARING FOR CABLE



ANCHOR SYSTEM DETAIL

NTS

**WaveEater
Grid System Design,
Construction and Components**