POTTER 19 BACKSTAY KIT INSTALLATION INSTRUCTIONS

Important!

Read these instructions all the way through before attempting to install the backstay kit. Do not proceed with the installation unless you are confident that you understand and can follow the instructions.

Observe all safety precautions provided with all tools and materials, including materials not supplied in the kit.

Introduction

In its standard configuration, the Potter 19 mast is supported by a forestay, two upper shrouds, and two lower shrouds. A backstay is available as a factory installed option. This kit permits installation of a backstay on boats that are already in service, exactly duplicating the factory installed backstay in every respect. Most owners can install the kit in a few hours using common tools.

The following items are included in this kit:

- Masthead plates (2)
- 1/4" self-locking nuts (3)
- 3/8" self-locking nuts (2)
- Turnbuckle
- Chain plate cover
- Backstay cable
- 1/4" x 2" bolts (3)
- 3/8" x 1-1/4" bolts (2)
- 3/8" flat washers (4)
- Chain plate
- 3/16" aluminum Pop rivets (3)

You will need the following additional tools and materials to install the kit:

- Handheld electric drill
- 3/16", 5/32", and 3/8" drill bits
- Pop Rivetool
- Small flat file
- Large flat-bladed screwdriver
- Two 9/16" and 7/16" hex wrenches, or two medium-size crescent wrenches
- Marine sealant, 3M 4200 or equal
- Liquid epoxy or similar material rated for marine use

To install the backstay, you must:

- Attach the backstay cable at the masthead.
- Cut a slot in the Potter 19 rear deck to allow the chainplate to recess into the hull.
- Locate and drill two holes in the transom for the chainplate bolts.
- Install the chainplate in the transom.
- Attach the backstay cable to the chainplate.

Note:

You will need an assistant to help you with some parts of the installation.

Attaching the backstay cable at the masthead

1. Lower the mast as described in the *Potter 19 User's Guide*.
2. The two sheaves guiding the main halyard at the masthead are held in place by swaged aluminum pins. Locate and remove these pins as follows:
   a. Drill into the exact center of each pin using a 1/4" bit to a depth sufficient to free each pin on one end.
   b. Pound the pins out of the masthead fitting using a drift punch or one of the 1/4" stainless steel bolts supplied with the kit.
3. Locate one masthead plate on each side of the masthead such that two of the holes in the masthead plates line up with the holes in the masthead fitting, and the pointed end of the plates points downward.
4. Secure the masthead plates to the masthead with two 1/4" bolts and self-locking nuts.
5. Attach the backstay cable to the masthead plates with one 1/4" bolt and self-locking nut.
6. Raise the mast as described in the *Potter 19 User's Guide*.

Cutting the chainplate slot

1. Locate the tops of the four bolts holding the keel winch to the rear deck.
2. Measure 5" to the right from each of the two rightmost bolts that hold the winch. Draw a line through these marks aft to the transom edge.

Note:
"Right" means your right when standing behind the boat facing forward.

The measurement above is not critical. Anything from 2" to 6" is satisfactory. Ideally, the chainplate should be as near to the centerline of the boat as possible without interfering with the tiller, but look inside before drilling and allow yourself room to work.

3. Draw a line parallel to and 3/4" in from the edge of the transom crossing the line you drew in step 2. *This measurement should not include the rub rail thickness. Measure from the transom edge, not from rub rail edge.*
4. Drill a 5/32" hole through the deck at the line intersection.
5. Look inside the hull to confirm that the hole you just drilled is through the deck close to the transom, but does not penetrate the transom.

Note:
If the hole did not come through where you expected, you can try again without serious consequences. The chainplate cover will hide your mistakes.

6. Drill another 5/32" hole just to the right of the hole you just drilled such that the two holes nearly touch.
7. Repeat step 6 until you have a series of holes parallel to the transom that are, in total, as wide as the chainplate.

8. Work the drill in the holes until the holes join to form a slot that the chainplate can slide through.

Locating the chainplate transom holes

1. Attach one end of the turnbuckle to the chainplate cable.
2. Attach the other end of the turnbuckle to the hole in the pointed end of the chainplate.
3. Insert the chainplate in the transom slot such that the pointed end of the chainplate points toward the centerline of the boat.
4. Push the chainplate into the transom slot until the backstay cable is under light tension (not slack, but held without straining).
5. Mark the chainplate where it meets the hull, then remove the chainplate and disconnect the turnbuckle.
6. Sighting down the transom from above, draw a vertical line on the transom that is centered on the chainplate slot.
7. Hold the chainplate against the line you drew in step 7, with the mark you made on the chainplate in step 5 level with the top of the deck.
8. Mark the transom through the top and bottom holes in the chainplate.
9. Remove the chainplate and drill a 3/8" hole through the transom at each of the locations found in step 8.

Installing the chainplate

1. Mix a small quantity of liquid epoxy and apply it to the inside of the holes in the transom to seal the hull core against water intrusion.
2. Have your assistant crawl into the starboard quarter berth, facing aft, with a 9/16" wrench, two 3/8" self-locking nuts, and two 3/8" flat washers in hand.
3. Place a 3/8" flat washer on each of the 3/8" bolts supplied with the kit.
4. Insert the chainplate into the chainplate slot until the holes in the transom line up with the holes in the chainplate.
5. Apply marine sealant to the flatwashers and bolt heads, then insert the bolts all the way through the transom and chainplate.
6. Have your assistant place a flat washer and self-locking nut on each of the two bolts and tighten the nuts until they are secure, while you hold the bolts from turning from outside the hull.
7. Wipe off all excess marine sealant.

Final assembly

1. Slip the chainplate cover over the chainplate until the cover is flush against the deck.
2. Mark the deck through the two small holes in the chainplate cover, then remove the chainplate cover.

3. Drill a 3/16" hole through the deck at each of the locations marked in step 2.
4. Apply marine sealant to the deck around the base of the chainplate and in each of the holes drilled in the previous step.
5. Slip the chainplate cover over the chainplate until the cover is snug against the deck.
6. Attach the chainplate cover to the deck using the Pop rivets supplied with the kit, then wipe off all excess marine sealant.
7. Attach the turnbuckle to the topmost hole in the chainplate.
8. Confirm that the forestay and shrouds are correctly tightened as described in the *Potter 19 User's Guide*, then tighten the backstay turnbuckle until the backstay is snug.

That's it... go for a sail and see how you like it.

Note:
Expect the stainless steel cable to stretch slightly after a few hours of use. Adjust the turnbuckle as required.

The Potter 19 is a product of:

International Marine
922 West Hyde Park Boulevard
Inglewood, California 90302
(310) 654-5959 • http://www.westwightpotter.com