

T34C Tech Articles & photos

By

George Harrington Colligan



T34C Babystay Installation

See Appendix A for enlarged Babystay images

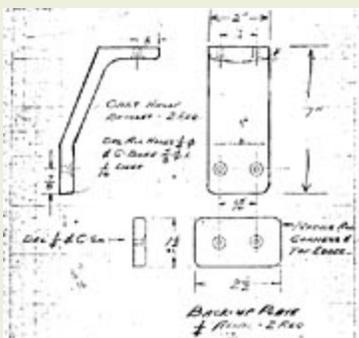
Installing a babystay



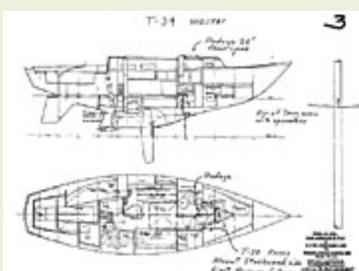
Completed installation



S&S instructions



Parts sketch



Deck layout

Why install a babystay?

When I first got my Tartan 34, I noticed that, when beating to windward in a breeze, the mast was subject to some degree of pumping. This is due to the single lower shroud rigging arrangement. Installing a Babystay is the solution.

S&S anticipated this need and set forth specifications on how to do it for both the Tartan 34 and 30. I have these specs and I am passing them along.

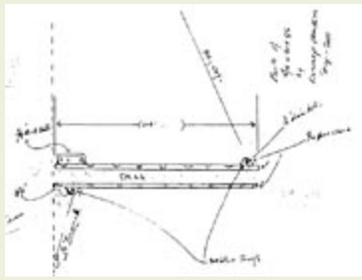
Installation Tips:

The installation is relatively straightforward. I have, however, made a couple of modifications since I observed that a simple pad-eye bolted through the coachroof resulted in some flexing and raising the deck a bit above the lintel of the forward head door. (I had experience this once before on a San Juan 34 and applied a similar solution.) In the photo, you will see 5/16" ss bar stock bolted to the deck containing both a tang welded at the leading end and a bail, for halyards, at the after end. Drawing # 4 details this fabrication.

It represents a very rigid sandwich held to the mast underneath by a welded tang and a 1/2" bronze turnbuckle attached to the mast with a heavy duty pad-eye tapped into the mast with 5/16" ss machine screws. This approach uses the deck as a spreader and holds down the roof flush with the head door lintel. You will have to briefly remove this wooden piece to notch it to allow the ss bar stock to pass over it.

I have also substituted 5/16" 304 ss for the aluminum castings called for by S&S for the bulkhead knees, shown in drawing # 2. For two reasons. I had it handy and, importantly, aluminum castings are prone to cracking under sudden loads. The ss will not either crack or bend in any way. On the mast, I had a strong tang fitting made by Metalmast Marine. It is held on each side by 1/4-20 ss machine screws. The deck plate is held down with 1/4-20 hex head bolts backed by ss washers and lock nuts.

Be sure to countersink all the holes to insure a good seal. I use 3M-5200 for all my sealant uses. I've never been burned. Lastly, it is important to cover the babystay turnbuckle against catching



Deck detail



Cabin brace



Tang and turnbuckle

on sails or legs. I used a gray elkhide and a baseball stitch to secure it. This is a good method as it is pretty and when you slide the cover up, it stays in place while you adjust the turnbuckle. The wire is 1/4" 1x19 Loos ss cable. Your rigger can make this but be sure to measure the distance from the mast tang to the deck tang carefully, as a small difference can rob you of sufficient "take-up" on your turnbuckle.

Appendix A - Babystay images



TARTAN 34 MID STAY

INSTALLATION INSTRUCTIONS

SPAR:

Mount Schaefer tang on forward edge of spar with the eye on a line even with the spreaders. Hold tang in place, drill (9/64" bit) and tap (10/24 tap). Mount the tang using 3/16 x 1/2 R.H.M.S.

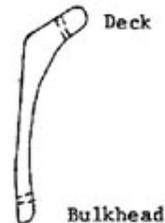
DECK:

Mount M.H. pad eye on deck 26" forward of spar on the centerline of the deck. Pad eye will be approx. 2-1/2" aft of forward hatch. Place pad eye in the center of 5" backing plate and drill one 1/4" hole forward. Put pad eye in place on deck and drill through the deck. Put backing plate on with one 1/4-20 x 1-3/4" bolt. At this time just snug up nut. Drill remaining 3 holes through deck and backing plate. Remove nut and bolt, clean deck of shavings and dirt. Bed the pad eye with bedding compound and secure to deck using 4 1/4-20 x 1-3/4" SS F.H.M.S.

KNEE INSTALLATION - VEE BERTHS:

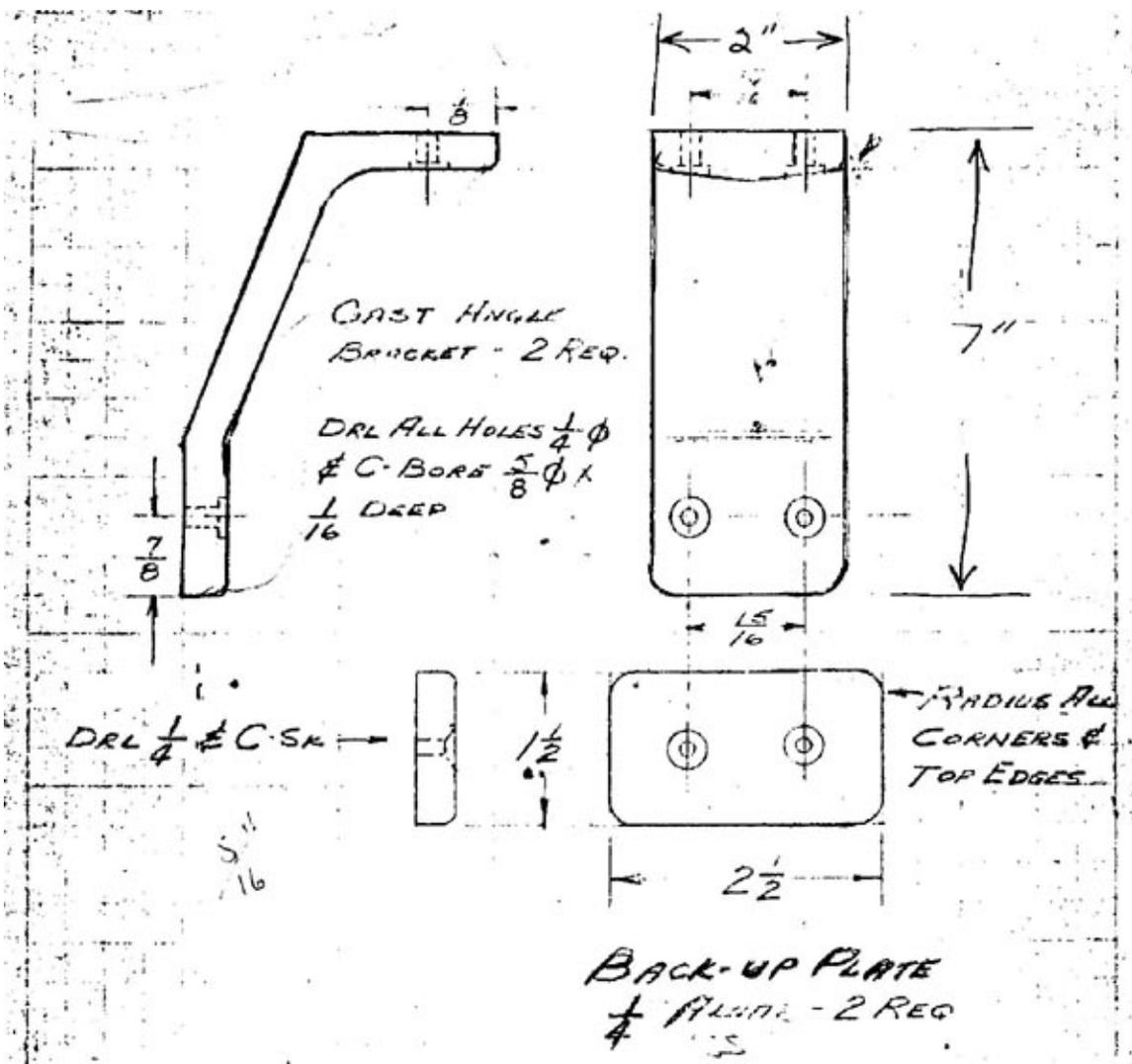
(Short side of knees to deck):

Mount knees on vee berth bulkheads as far inboard as possible. Making sure knees are tight to the deck, drill 1/4" holes through the bulkheads and backing plates (1/4" x 1" x 4"). Tighten knees in place with 1/4-20 x 1-1/2" SS F.H.M.S. With knees in place, drill up through deck. After these holes are drilled, center backing plate over the holes on deck and drill one hole from below. Put one 1/4-20 x 1-3/4" bolt through plate and snug up from below. Drill remaining holes, remove plate, clean up deck area and bed backing plate. Secure plate to the deck using 4 1/4-20 x 1-3/4" FH bolts and tighten.



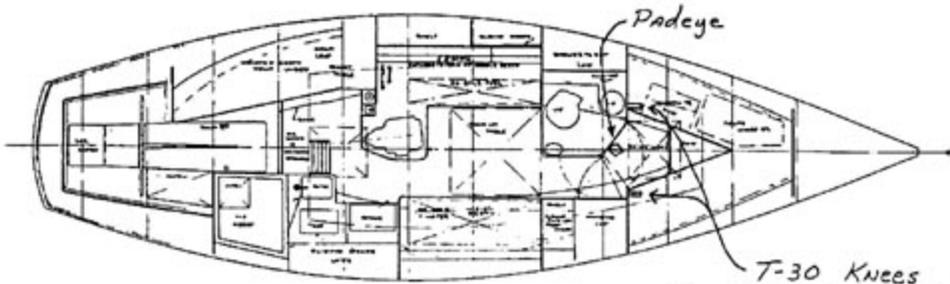
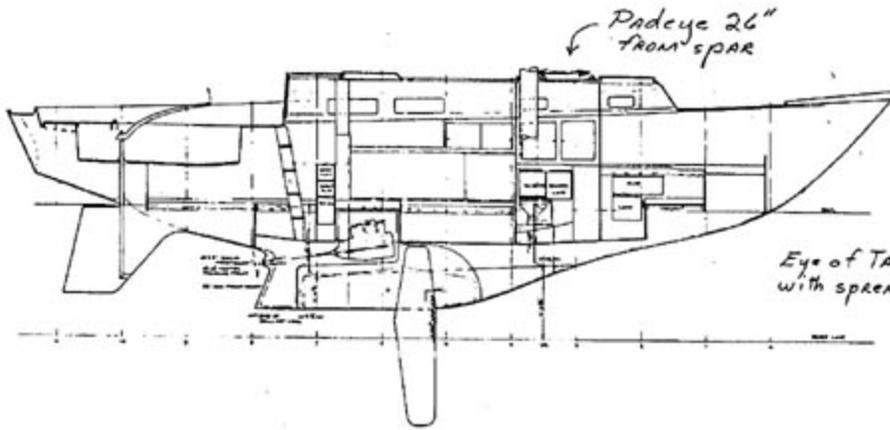
MIDSTAY:

The toggle and turnbuckle must be swaged to the 1 x 19 wire and should be done by a qualified rigger. Length of the stay must be 20' 7" from the eye of the tang to the the of the turnbuckle. After stay is swaged, mount on spar and pad eye. Adjust turnbuckle until midstay is tight.



T-34 MIDSTAY

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DESIGN BY: JESSE
 CABLE ARRANGEMENT PLAN
 BY: JESSE, CHRISTOPHER B. AND
 DAN
 DRAWING NUMBER: PLASTICS ONE
 DRAWING NO. 1011
 ROSSMAN & STRONG, INC.
 22 MADISON AVE., N.Y.C. 17
 1961 AT THE UNIVERSITY BOOK

