Idler Plate on a 1990's C&C 34/36

If you are experiencing play in the steering wheel, it may mean the idler plate is failing. Check your steering wheel for play and look under the pedestal for rust.

When the plate corrodes enough, the sheave towers under tension from the cables going to the quadrant and are pulled back. Tightening the cables can remove the slack but eventually an idler pulley will break loose or the cable will jump the sheave.

My steering system was trouble free for 12 years before I noticed about an inch of play in the wheel. Over the years, I had periodically oiled the cables and sheave axles but never needed to adjust the cables. Suddenly I had play in the wheel and slack in the cables. Upon lifting the cockpit floor section to access the quadrant and cable, I saw a small pile of rust under the pedestal base. I tapped the bronze sheaves and larger chunks of rust fell out like peanut brittle.

The original Edson plate was made from mild steel. It was cut and pressed into shape and painted black and is no longer made. The new Edson plate has a thick cast aluminum base with stainless sheave towers that are too long to fit our boats and have to be cut down to fit into the well under the pedestal. Using the lowest hole in the tower, I found I needed to lower the quadrant on the rudder shaft about 1/2". My old sheave towers are bronze and I wanted to reuse them but they are riveted onto the old plate. I contacted Edson several times but they never offered me good options. Bronze would make a better choice for something so important.

In the beginning, I thought I could grind the aluminum base or the fiberglass well, down enough to fit flush, but adding a trim ring between the pedestal and cockpit floor, made more sense. I was afraid to reduce the thickness and strength of fiberglass in the well. In the end I made a trim ring of 3/8" expanded PVC sheet. It can be found in 2015 at lumber yards for $75 for a 4' x 8' sheet and they will cut it down so you can fit it inside a car. Great stuff to use on any outdoor project. It may be possible that ¾" PVC or Starboard would reduce some grinding, not sure?

I expect a good fabricator like Garhauer could make a better idler plate using stainless steel could keep it thin. They could copy the old plate, and rivet the old sheave towers onto it. And I expect it would cost less than half of what Edson charged me.

If you attempt this project, be sure to mark the pedestal (blue tape) before disassembly and keep all parts, screws, nuts in order. For the base, I bought stainless bolts and aircraft nuts and large fender washers for a fraction of the cost of one aluminum bolt from Edson. SS is much stronger and doesn't seem to affect my compasses.

Here are some pics showing the new plate compared to the old one.

The new plate after modification

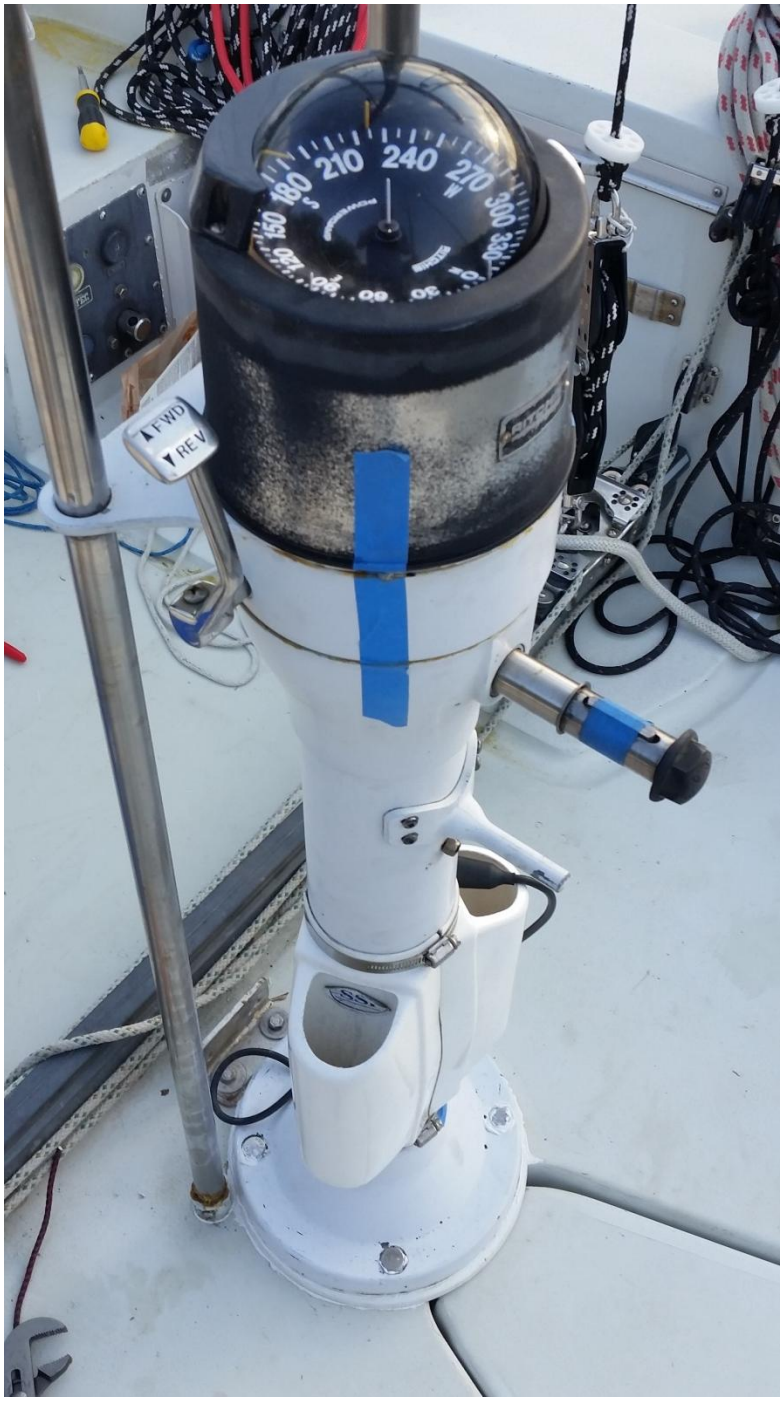
Brown Rust under an aluminum pedestal is a bad sign:

Throttle and shift cables marked.

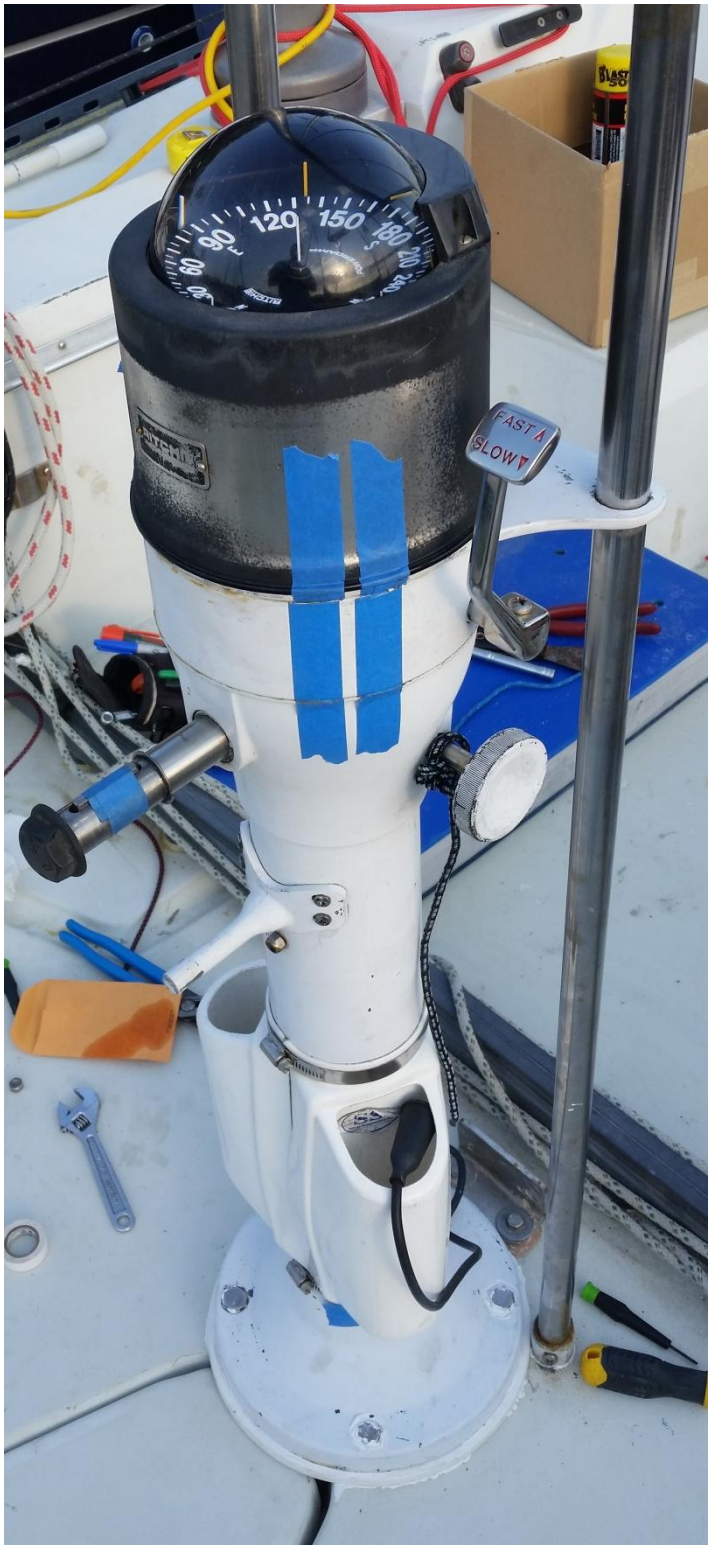
Pencil line on trim ring shows the pedestal outline.

Compare holes for pulley axles: New position will be ¾” lower in the deck well.

Port side of pedestal (back together).


210
240
270
300
330
FWD
REV

Starboard side, key taped on shaft



Deck Well from above.

Deck Well from below.

Never saddle a dead horse:

The quadrant needs to be lowered to get a fair alignment to idler pulleys.