

TASAR RCB Track Retro-Fit Kit

(V1.3 - Feb 2010)

Introduction and Overview...

Tasar shrouds slide fore and aft on tracks which are bolted to the side decks. For thirty years they have run on stainless C-section track with chrome plated brass sliders. These have worked very well - and they still do; though, especially when new, they can be very difficult to move when under load. So the class has now allowed these tracks to be replaced by Ronstan aluminium track and RCB (re-circulating ball) cars. They will not make the boat go faster, but they will make fine adjustment of shroud position possible.

Tasar Class Rules...

The fitting of RCB tracks to new and existing Tasars is a specification change governed by two class rule interpretations. You can see the originals at:

http://www.tasar.org/wtca/rules/rules_isaf_int.html

Interpretation 37: Retro-fitting RCB Shroud Tracks - (amended 2008-08-17)

ISAF has recently approved a specification change by the designer allowing new Tasars to be fitted with RCB shroud tracks and slide cars. The purpose of this Interpretation is to enable RCB shroud tracks and slide cars to be fitted to existing Tasars as a substitute for the stainless steel C section track and brass slides currently used.

With immediate effect a 19mm RCB system comprising the following fittings or their equivalents may be fitted to existing Tasars:— 2xRonstan RC11902 Cars, 4xRonstan RC11980 Track Ends, 1xRonstan RC1190-1.0 track, 2xClamcleat CL268AN Cleats, 4xRonstan RF1850S Shackles.



An under-gunwale rigid load-bearing backing plate of solid 18mm alloy or stainless bar which extends approximately 75mm past each end of the track, or equivalent.

Measurements: The track shall be fitted with bolts to the backing plate that shall fit into the gunwhale groove. The distance between the bow U bolt, measured as shown at deck level to the forward track end bolt hole shall be a minimum of 2125mm and a maximum of 2135mm (photo 1). Car travel must not exceed 140-mm.

Interpretation 38: RCB Track fasteners

Effective immediately, 1/4" or 6mm MTS bolts must be used at the front and rear ends of RCB tracks. Other, intermediate bolts, of which there may be 1 or 2, may be either 3/16" (5mm) or 1/4" (6mm) MTS. (Posted 2009-08-07, amended 2009-09-14)

Things to know before you start...

- You may find that your original tracks are a few mm out of position. The rules and interpretations are now very clear regarding the position of the RCB tracks and you should be careful not to re-produce an error made by the original builder of your boat.
- The part of this job most likely to cause problems is the drilling of the new holes. They need to be at 90 degrees to the deck surface both longitudinally and transversely, and it is also important that the backing rods fit neatly into the gutter of the hull/deck joint. This is not difficult: the backing rod supplied by Signal Locker can be used to guide the drill - but don't rush this part of the operation.
- Neither should you rush the part where you are sliding the new car onto the new track; because if you do... the little plastic balls will break free and run amock around the house.



Contents of kit

In the standard Signal Locker RCB retro-fit kit, you will find...

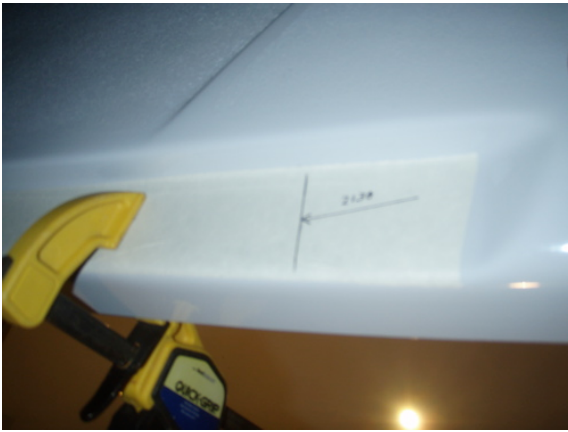
- 2 off Ronstan RCB track cars
- 2 off aft track end stops (drilled off for pull-back line)
- 2 off control lines (threaded through aft end stop)
- 2 off fwd track end stops
- 2 off Ronstan RCB tracks (240mm long with 1mm bear tape)
- 2 off pull back cleats (with shackles)
- 2 off black anodised backing rods
- 4 off track spacers
- 3 mm bear tape strips
- 2 off pull back handles
- 4-off M6 x 65mm CSK machine screws
- 4-off M6 Nylock nuts and washers (nylon and st.st)
- 4-off M5 x 60mm CSK machine screws
- 4-off M5 Nylock nuts and washers (nylon and st.st)
- 2-off M6 and 2-off M5 nuts (for dry fitting)
- 1 pack of Tef-gel

In addition you will need...

- A tape measure
- A drill (lightweight battery drill works best) with 5mm and 6mm drill bits (3/16th and 1/4 inch are also useful to drill clearance holes)
- Masking tape and a pencil
- Resin or gel to fill the old holes and to seal the new ones
- A clamp; a 'sliding arm' clamp (see photo 1 on page 3) seems best. Better for instance than a G-clamp
- A medium sized screwdriver, and an electrical screwdriver
- Spanner to fit M5 and M6 nuts

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Step 1 - Preparation

- Remove existing C-tracks, and all sealant
- Clean out existing holes with a drill
- Fill the existing holes with resin or gel coat filler

Step 2 - Mark the fwd bolt

- Measure 2130mm aft from the forestay U-bolt and put some masking tape on the gunwhale in the approximate position of the forward bolt hole.
- Then measure aft from the U-bolt again, holding the tape measure as shown in the photo on page 1.
- Mark an arc on the masking tape, 2130mm aft of the U-bolt (photo 2). The forward bolt will pass through this arc.

Step 3 - Clamp backing rod

We suggest that you drill the holes from under the gunwhale, using the backing rods as drill guides. To prepare the job, do the following:-

- Clamp one backing rod into the gutter loosely. Use a sliding parallel arm clamp, with one arm on the flat of the backing rod and the other arm on the deck. This will hold the backing rod flat parallel to the deck surface. (Photo 2)
- Hold an M6 drill bit (no drill - just the bit) in the forward hole of the backing rod and 'eye-it-up' in relation to the 2130mm arc on the masking tape above.
- Move the backing rod forward or backward until the forward hole of the rod lines up with the arc. You can judge this by eye remarkably accurately. See photo 3.
- Make sure the backing rod is a snug fit into the inner edge of the gutter. There is some 'play', and it is important that the rod sits as far inboard as possible. When that looks OK, check the fore and aft alignment of the drill bit with the arc again. Keep checking till you are completely happy. Then check again.



Step 4 - Drill off front hole

- When you are 100% happy with the front hole position of the backing rod, drill off the forward hole through the backing rod using a 6mm drill. Use the backing rod as a drilling GUIDE, not a JIG. The difference is that a jig would direct the drill bit for you - whereas a guide will only help you keep the drill square to the deck surface. Don't force the drill, and be careful not to twist or move the backing rod.

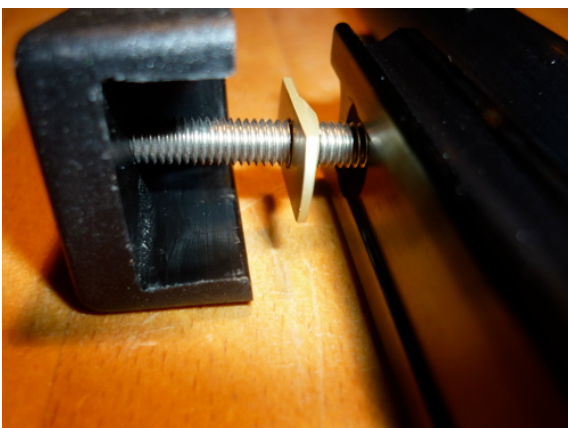


Step 5 - Drill remaining holes

- Fit a 6mm bolt through front hole in the deck and rod: use the ordinary nut provided (ie. not a nylock), and do it up hand tight. Do not use track at this point.
- Re-clamp the backing rod, making sure the rod is still a snug fit into the inner edge of the gutter.
- Then drill off the remaining holes. The forward and aft holes need to be 6mm. The two middle holes need to be 5mm

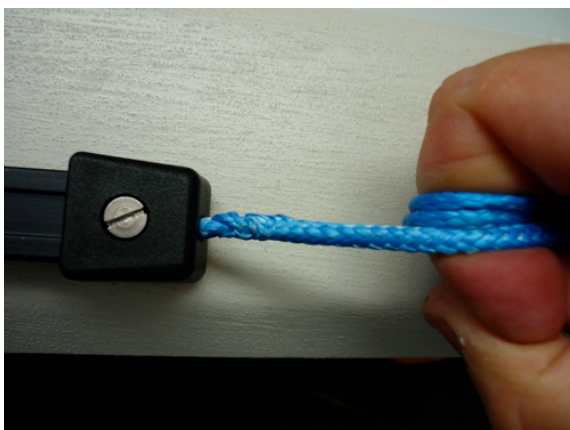
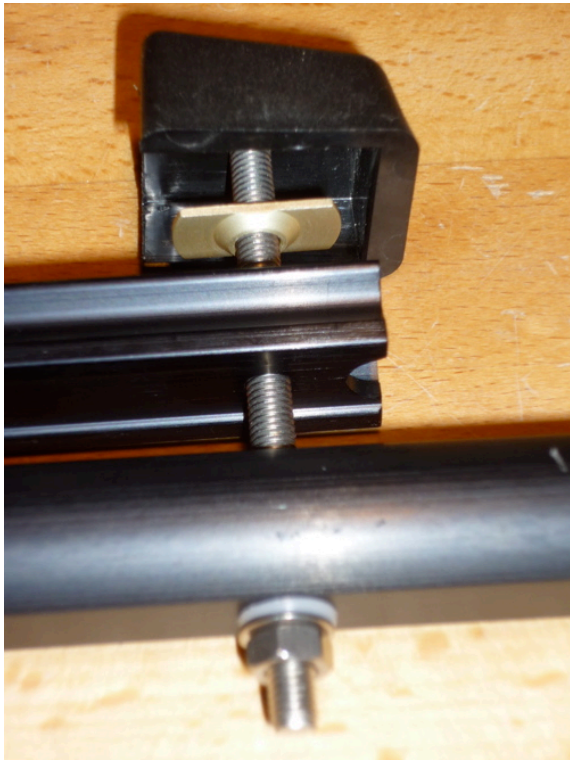
Step 6 - Seal holes

- Dry fit an RCB track and backing rod with 2 off 5mm and 2 off 6mm bolts, to make sure the holes, track and rod line up. Theoretically there should be some room to spare on each bolt: but this is reality, and it is better to ease one or two of the holes than to force one of the bolts to go where it doesn't want to go... You want the bolts to be a loose fit, because the holes you have drilled should be sealed.
- Mix some gel coat or resin and coat the inside of each hole - running something like a cocktail stick round the inside of each hole.



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Step 7 - Grease bolts & assemble track

- We recommend that you use 'bear tape' to seal the track and the rod. 1mm tape for the track and 3mm tape for the rod. We provide the track with 1mm bear tape already applied; it has backing paper which needs to be removed - BUT NOT YET. The 3mm tape for the backing rod needs to be applied after the holes have been drilled in the deck: one strip of 3mm tape to the top (rounded) edge of the rod and you should do this now. When done, push the blunt end of a drill bit through the rod to make holes in the tape.
- Use Tef-gel to grease up the bolts: work the Tef-gel into each bolt thread over the whole length of the bolt. This will reduce the tendency of the aluminium backing rod to corrode when in contact with the stainless bolt, and will give you a good chance of undoing the bolts in a few years time if you need to.

Step 8 - Assemble 3 bolts

- Assemble the track and rod onto the deck using just the two middle 5mm bolts; loose fitted for the time being. Also, don't use the nylock nuts yet. We provide 4-off ordinary nuts for this 'dry run'.
- Check that the bolts provided are the right length; boats differ by a few mm, so you may have to cut the ends off the bolts. Allow length for the slightly deeper nylock nuts.
- Next, fit the front bolt (one of the four 6mm bolts provided). It is longer than the middle bolts because it passes through the forward end stop (which is the one that does not have the pull back line already in place).
- Place a 'spacer' between the track and the end stop, with the cone downwards to fill the countersink of the track. (See the top photo on this page)
- Push the bolt down through the end stop, through the spacer and track, through the deck and the backing rod.
- We suggest two washers per bolt: a nylon washer against the rod, and a stainless washer between the nylon washer and the nut. The nylon washer will reduce corrosion, the stainless washer will stop the nylon washer being squeezed out. Don't do the nuts up tight yet, this is just a dry run...

Step 9 - 4th bolt and aft stop

- Before you put the 4th bolt through and fit the aft stop, you need to slide the RCB car onto the track. No instructions here - just be careful to butt up the delivery track squarely. *(For those of you who were not careful enough, you are looking for 40 Torlon balls...)*
- Next, push the spliced eye of the pull-back line into the end of the RCB track. Do this with a small screwdriver. Then put the screwdriver down through the bolt hole and push the spliced eye to the edges, making room for the bolt to pass through the track. See photo 3 on this page.
- Then you can push the bolt through the aft end stop, through a spacer (cone side down) then, gently turning the bolt, work it down through the track and the spliced eye. See photo.

Step 10 - Tighten up the bolts

- When the dry run is complete and you are happy that everything is in its proper place, replace the nuts with nylocks.

Step 11 - Fit pull back kit

- Attach the cleat to the aft end of the car bridle.
- Thread the pull back line through the cleat and through the pull back handle. Tie a knot in the end of the line to secure it in the handle.

STEP 12.....Smile, and repeat the process on the other side.