

TASAR TECHNICAL - LOWER MAST INSERT (v1)

Class rules call for every Tasar mast to be fitted with a 'mast insert'. A mast insert is a short piece of mast sleeve section that fits inside the lower mast - held in place by the Diamond Top Bolt - and which sets the 'bury' of the upper mast into the lower. This Tech Sheet tells you how to make an insert from a broken mast, and shows how to fit an insert into the lower mast section at the correct position.



Must I have an insert...

UK Tasars used to be rigged with a triangular hound strap fixed to the mast with 6 rivets. This style of hound strap also serves to stop the upper mast sliding too far into the lower mast. If you have one of these hound straps you probably don't need to fit an insert, unless you are going to compete in a National or World Tasar event; in which case you will need to fit an insert to comply with class rules.

Making or buying a mast insert...

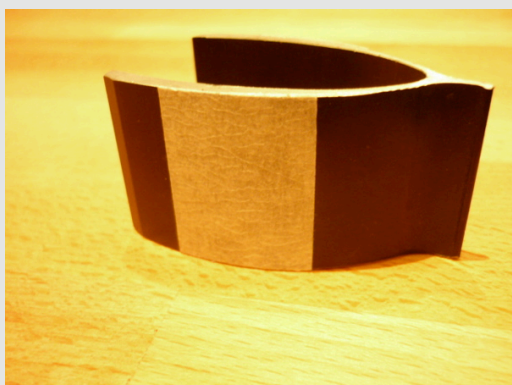
You can buy a mast insert from Signal Locker, or, if you have a broken top mast you can make a mast insert yourself. The insert is made from the same section as the mast sleeve - simply cut a 30mm long piece off the discarded sleeve.

How is the insert held in place...

The insert is held in place by the diamond top bolt. There is a hole in the insert which lines up with the holes in the mast - the diamond top bolt goes transversely through the mast and the insert and the stainless eyes at the top of the diamond wires. If your mast is more than 3 or 4 years old the diamond top bolt may be a few mm higher or lower than the current lower masts. For this reason we supply inserts either drilled or undrilled.

Step 1...

You should first make sure that the insert fits inside the lower mast. It is sometimes necessary to file the top or bottom edges a little. You want the insert to be an easy fit so that it slides into the mast - but not too loose, or it will jam (Photo 1).

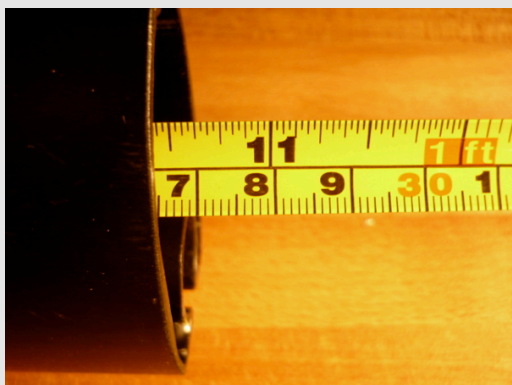


Step 2...

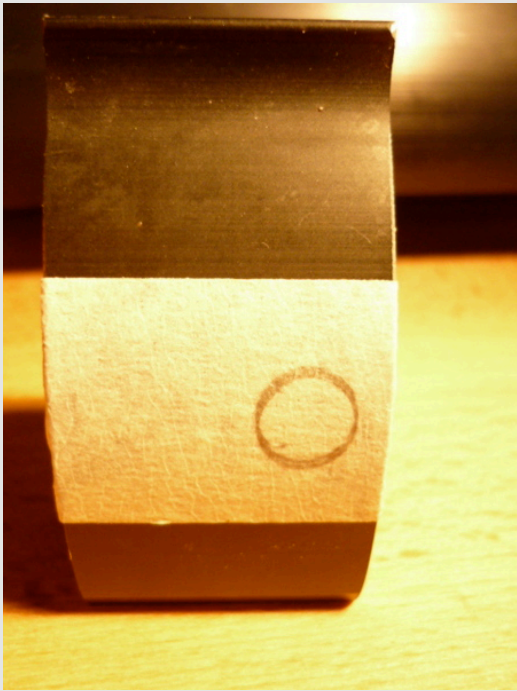
Then you need to remove the diamond top bolt and the diamond wires.

Step 3... (for undrilled inserts)

Next you need to drill a hole in each side at the same height and position as the diamond top bolt. Put some masking tape on the sides as per (Photo 2).



Slide the insert into the mast until the top edge is 265mm below the top of the lower mast section (Photo 3).



Mark the position of the diamond top bolt hole on both sides of the mast insert with a pencil (Photo 4).

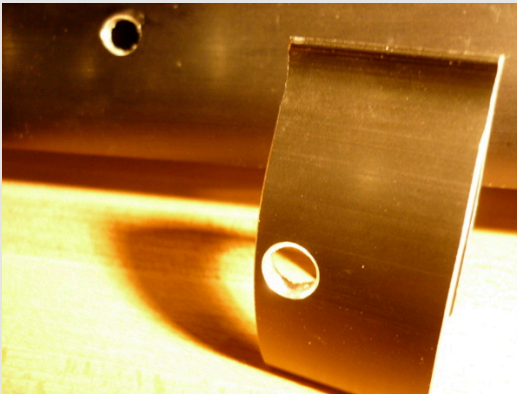
Pull the insert out of the mast and drill a 10mm hole through the insert at the position you have marked. Drill a 3mm pilot hole first, then a 6mm hole, and then a 10mm hole - to make sure that the hole you drill doesn't wander off centre (Photo 5).

Step 4...

Now you are ready to re-assemble the diamond top bolt, diamond wires and insert. This can take a while; there is a knack to doing this job; unfortunately very few people do the job often enough to get the knack - so you may need to use up some of your hard earned patience.

Push the drilled-off mast insert into the mast until the holes in the mast line up with the ones you have just drilled through the insert.

Push the diamond top bolt through one side of the mast and into one side of the insert (not too far through - 2mm is enough).



Look down the top of the mast, and feed one diamond wire up into the mast; twist the diamond wire until you can see that it is in line with the top bolt; then push the top bolt further into the mast and through the eye in the diamond wire (Photo 6).

NOTE: The final photo shows how not to do this job... If you push the diamond bolt in more than half way through the mast before trying to catch the diamond eye, you'll find that the eye gets on the 'wrong' side of the bolt rope slot. You need one eye each side.

Once you have caught one diamond wire, feed the other diamond wire up into the other side of the mast and repeat the process.

