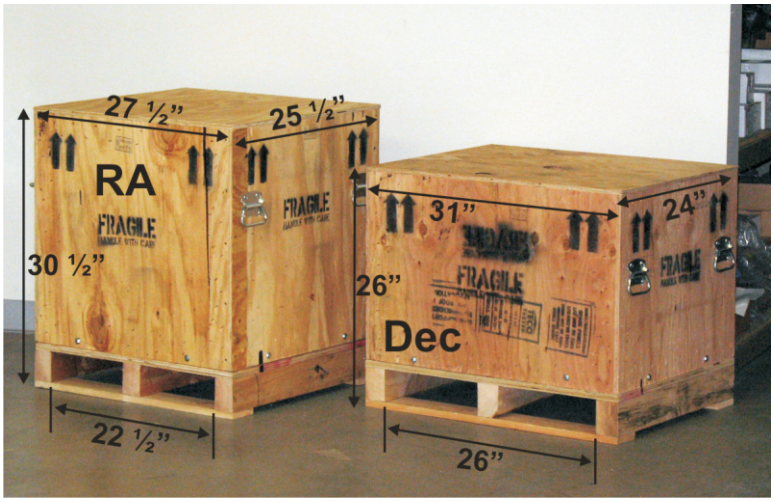
Unpacking your 3600GTO

Your 3600GTO Right Ascension and Declination Axes have been shipped in custom-made shipping crates that were designed so that they could be re-used for transport, or in the unlikely event that you need to return an axis to Astro-Physics for service. It is very important that you follow these instructions for uncrating the two axes so that the shipping crates and the axes themselves are not damaged.



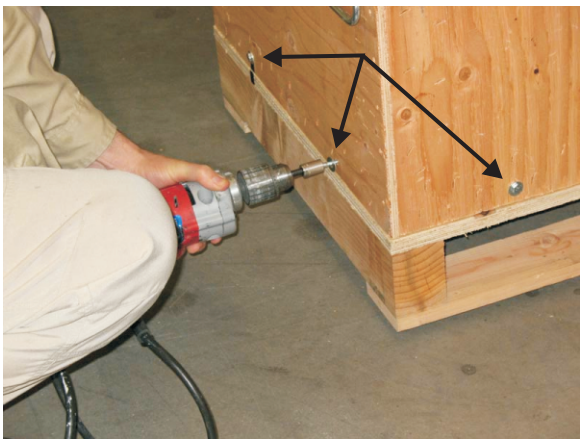
The crates were designed to be lifted either by hand with the attached folding handles or with a pallet jack or fork lift. (max. fork width - 22 ½") We would certainly advise that you avail yourself of mechanical assistance whenever and wherever possible. If you intend to transport the mount in a vehicle like a van or SUV, be sure that you have enough clearance to get the crates into the vehicle. We would also suggest that you lay down a thin plywood base over any carpet so that you can slide the crates

.The key to successful transportation, unpacking and installation is good planning. Think ahead about:

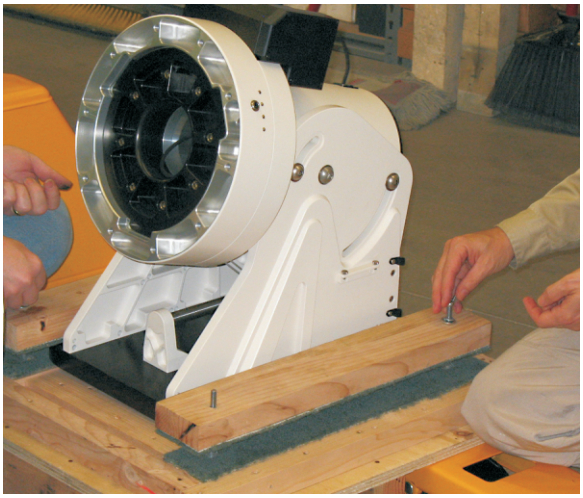
- Where the delivery personnel should unload the mount;
- Where the mount will sit until you are ready to install;
- How you will get the mount into your observatory;
- And finally, how you will get the mount up onto your pier. (Talk to your local high school football coach and science teacher. See if there aren't a couple of linemen from the team that need a few extra credit points in science class!)

Step 1. Transport the two crates to your observatory or observing site. To protect the axes, we recommend that you keep them crated as long as possible, and that you locate the crates as close as is practical to the pier. If you are in rather tight spaces in an observatory, leave the declination axis outside until the RA is set in place and the RA crate has been removed from the observing area. If you will be lifting the RA axis into place by hand, you may want to place the crate a full crate's width from the pier. This will allow you to set the top of the crate between the pier and the crate-base to use as an intermediate step.

Step 2. Remove the top of the RA crate. Just above the pallet base of the shipping crate are eight 1/4" lag bolts - two on each side of the crate. Using a 7/16" wrench or socket (a cordless drill works great!), remove the eight lag bolts and washers. When the bolts are removed, lift the top of the crate straight up and off of the pallet base. Be sure to lift straight up, and lift high enough that you do not hit the top of the mount with the crate top as you remove it to the side. If you will be using the crate top as an intermediate step, position it between the crate bottom and the pier making sure you have adequate space to maneuver.



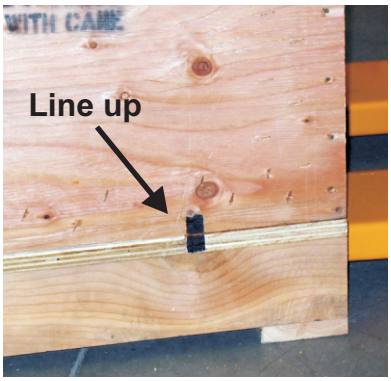
Step 3. Remove the protective plastic. There is a layer of protective plastic sheeting covering the mount. It is stapled in place. You can remove it and keep or discard it as you prefer.



Step 4. Remove the RA lock down boards. On each side of the RA axis is a padded two-by-four that is clamped down onto the RA base with two through-bolts. The padded boards are secured with hex nuts and then have wing-nuts as jam nuts to keep the hex nuts from vibrating loose during transit. Use a plier to break the wing nuts loose, and then remove the hex nuts with a ½" wrench or socket. Once the nuts and washers are removed, carefully lift the two-by-fours off of the through-bolts and set aside. Do not lose or discard the hardware!

Step 5. Lift the RA axis onto the pier. If possible, we recommend using a hoist to lift the axis. A lifting strap can simply be run through the axis for hoisting. If you will be lifting by hand, a multi-stage approach with two people is often the easiest. We have found that using a short lifting strap with a pipe length run through the strap's end loops works well to lift the axis onto the crate top. This prevents having to lift from ground level in an awkward position. Once you have the axis on the crate top, it can be lifted from each side by its base. Place the RA axis onto the pier top or 3600 Flat Surface Adapter as described in the 3600GTO Manual.

Step 6. Re-assemble the RA axis crate. At this point, it is probably best to re-assemble the crate for storage. Replace the padded two-by-fours onto their threaded rods and put the hex nuts and wing nuts onto the rod ends. Put things together exactly as they were when received so that you remember how it all fits together in the future. Line up the marks on the side and slip the crate top over the base. Fasten with the eight lag bolts and move the crate to its storage location.



Step 7. Move declination axis into position. How you position the dec crate will depend on how you will be lifting the axis into place. If lifting by hand, you may wish to consider using the crate top as an intermediate step, as was suggested for the RA axis. Since the RA crate is actually a bit taller (especially when fully re-assembled), you may prefer to use the RA crate as your intermediate step.

Step 8. Remove the top of the Dec crate. As with the RA crate, just above the pallet base of the shipping crate are eight 1/4" lag bolts - two on each side of the crate. Using a 7/16" wrench or socket (a cordless drill works great!), remove the eight lag bolts and washers. When the bolts are removed, lift the top of the crate straight up and off of the pallet base. Be sure to lift straight up, and lift high enough that you do not hit the top of the axis with the crate top as you remove it to the side. If you will be using the crate top as an intermediate step, position it between the crate bottom and the pier making sure you have adequate space to maneuver.

Step 9. Remove the protective plastic. There is a layer of protective plastic sheeting covering the axis. It is stapled in place. You can remove it and keep or discard it as you prefer.

Step 10. Remove Dec shipping bolts. The declination axis is secured to the pallet with four 3/8 socket head cap screws. Use your 5/16" Hex key to remove these four bolts.

Step 11. Mount the declination axis onto the RA axis. Instructions for attaching the dec axis to the RA are detailed in the 3600GTO Instruction Manual. Please read these instructions carefully before actually mounting the dec onto the RA, and follow them carefully.

Step 12. Re-assemble the Dec axis crate. Once the dec axis is mounted, re-assemble the crate for storage. Replace the four 3/8 socket cap screws into the base of the crate. Put things together exactly as they were when received so that you remember how it all fits together in the future. Line up the marks on the side and slip the crate top over the base. Fasten with the eight lag bolts and move the crate to its storage location.