



DELUXE TOP BAR HIVE KIT

ASSEMBLY INSTRUCTIONS

(Featuring both US and Metric dimensions)



Thank you for purchasing a Gold Star Top Bar Hive Kit! ASSEMBLY INSTRUCTIONS

These instructions begin with an inventory of all the parts included in your kit. Please lay out all the contents of the boxes, and do a quick check to make sure everything is there and intact. If anything is missing or damaged, please call us at 207-449-1121, or email us at christy@goldstarhoneybees.com and we'll take care of that right away!

You will need these tools to assemble your Gold Star Top Bar Hive:

Philips head screwdriver or screw gun staple gun with 1/4" (6.35) staples

It is also helpful to have:

A pencil A hammer

If you have purchased a Gold Star Deluxe Hive Kit – please note:

While all the parts of the Deluxe Hive kit are included in the box, we recommend that you paint the roof of your hive and we suggest using Mythic brand paints and primers. They are non-toxic and VOC-free. http://www.mythicpaint.com Choose a light color if you live in a warm climate; a darker color if you live where the winters are cold. You can paint **before** or **after** assembling the roof.

Are you just getting started with bees in top bar hives? Check out these resources!

The Thinking Beekeeper – A Guide to Natural Beekeeping in Top Bar Hives is the definitive how-to/why-to book on keeping bees in top bar hives written by Christy Hemenway, founder of Gold Star Honeybees, is available from Gold Star Honeybees' website: https://www.goldstarhoneybees.com/

Please also visit our **YouTube Channel** – it can be found here:

https://www.youtube.com/user/GoldStarHoneybees

Or... go to www.youtube.com and enter Gold Star Honeybees in their search bar.

And please come find your state's **Facebook** group, and connect with other beekeepers that are keeping bees in this natural, supportive way. To find your state's group – visit https://www.facebook.com/groups/xxxxtbh/ then change the xxxx to the name of your state!

We are very proud to be a part of your beekeeping journey...

WOODENWARE INVENTORY





HARDWARE INVENTORY



1) BUILD THE HIVE BODY

Locate the two Follower Boards. Stand them upside down – that means they are standing on the top of the "top bar" part, with their bottom edges pointing straight up. Put them about four feet apart, and parallel to each other. The ends of the top bars will stick out like little square "feet".

Locate the Hive Front and Hive Back (window) and the four push pins from the hardware bags.

Set the Hive Front and the Hive Back on top of the "feet" of the Follower Boards, so that they rest against the edges of the Follower Boards. Then use the four push pins to keep them in place.







Note: The insides of the Front and Back are the sides where the bee entrances are 1/2" (12.7mm) from the edge. If you have this set up right, the bottoms of these four parts will create a flat surface. You can probably see already how it will soon be a "box".

Now locate the two End Panels. The countersink shape of the pre-drilled holes faces the outside. Start each of the six 1 5/8" (41mm) sheet rock screws (the longer ones) into the countersunk holes on the End Panels.

Set the End Panels against the ends of the Hive Front and Back. Making sure that the edges of the Front and Back line up with the screws you've set into the End Panels, screw the End Panels onto the Hive Front and Back.

Now you can remove the push pins, but keep them handy, you will need them again!







Note: If you are working alone, it helps to push one End Panel up against a wall or other solid surface.

Voila! Now it's a box. Good work! Things just get easier from here.

2) ATTACH THE SCREENED BOTTOM

While you've got the box upside down - take the piece of Hardware Cloth and align it on the bottom of the Hive Box. Use the four pushpins again to tack the screen in place.





Then, using your staple gun, staple the Hardware Cloth along the perimeter. A staple every Couple of inches should do it. If needed, tap the staples in firmly with a hammer.

Note: The Hardware Cloth can be cut with scissors to improve the fit, if need be. But be Careful— it has sharp little points along its edges!

3) ATTACH THE BOTTOM BOARD

Take the four Angle Brackets and the twelve 3/4" (19mm) sheet metal screws. Set the Bottom Board on the bottom of the hive body with the pre-marked holes facing up. Set the brackets on the ends of the board with one leg of the bracket on the Bottom Board, and the other leg going over the edge of the board, and pointing at the ground. Attach the brackets to the bottom board using the pre-drilled holes, two in each bracket.

Note: The bottom board is shown here in the closed position, as for winter. Align the brackets with the pre-drilled holes on the side of the box between the legs and insert screws and tighten. You can change this easily in warmer weather by removing the screws, lowering the board, and re-inserting the screws.







4) INSTALL THE OBSERVATION WINDOW SHUTTER HARDWARE

Locate the Observation Window Shutter and set it in place in the window slot. Take the two Offset clips and two 1/2" (12.7) screws and attach in the pre-drilled holes along the bottom edge of the Observation Window (the edge nearest the screen bottom) Tighten securely.







Take the two thumb tabs and two 1" (25mm) screws, and install them in the pre-drilled holes along the top edge of the Observation Window (the edge furthest from the screen bottom). Tighten these enough that they will stay put when you turn them, but not so tight that they can't be turned using light pressure.

5) ATTACH THE ROOF RESTS

Align the Roof Rest along the top of the End Panel and draw a line in pencil beneath it. Screw the Roof Rests on to each panel just below that line you just drew. Use three 1 1/4" (32mm) sheet rock screws for each roof rest (the short ones!)







6) PUT THE LEGS ON

The legs go on with special hardware in order to make them removable for storage or transport. Take one 2 1/4" (57mm) bolt, put it through one of the flat washers, then insert it through one of the large holes drilled in the End Panel -- insert it from the outside of the box pointing in.

Thread on one of the Tee Nuts, with its prongs facing into the wood, and tighten—FIRMLY—until the prongs bite in and the tee-nut draws up quite flat into the End Panel. Repeat with the Remaining Leg Hardware.

Next, put a leg on over the protruding bolts. Add the second washer, then a Wing Nut. Tighten. Repeat for the other three legs.







You're doing really well. On to the next thing!

7) ASSEMBLE THE ROOF

Locate the Roof Parts. Take the two Roof Gable Ends, and the Roof Gable Rails, and lay them out to make a rectangular frame, with the painted sides out.

Start eight 1 5/8" (41mm) sheet rock screws (the long ones) into the pre-drilled holes in the Roof Gable Ends, line them up with the Roof Gable Rails and screw them together.







Note: Be sure that the beveled edges of the Roof Gable Rails are up, and turned so that the tallest edge is in the center. This should be fairly obvious, since the angle will match with the angle of the Roof Gable Ends.

This is another task where it is helpful to have a partner, or again, you can use the wall to push against. Now you have a rectangular frame, which is the base of the Roof.

ROOF CONTINUED...

Locate the two Roof Planks. Set the Roof Planks on the rectangular frame you just built.

The ends of the Roof Planks should line up with the outer edges of the Roof Gable Ends. The center line will be aligned with the peaks of the Roof Gable Ends.

The outer edge of each Roof Plank should have the pre-drilled holes lined up just above the long Roof Gable Rails. The planks should touch along the center, at the peak, as closely as possible.





Insert a 1 5/8" (41mm) (long) sheet rock screw at the peak on one end, re-check your alignment, and drive the screw. Repeat at the peak on the other end, checking that the Gable Roof frame and the Roof Planks are "square" with each other. Next drive the corner screws, checking for "square" each time. Then drive the center screw along each end. Repeat for the other Roof Plank.

Insert the rest of the 1 5/8" (41mm) (long) sheet rock screws along the long outer edges of the Roof Planks. Before screwing these in, be careful to check the bottom of the Roof Planks, to be sure that they will drive into the meat of the wood of the Roof Gable Rails.

Now locate the Roof Ridge Board and start the remaining ten 1 1/4" (32mm) (short) sheet rock screws into the ten pre-drilled holes. Center the Ridge Board down the peak of the roof, aligning the "V" in the Ridge Board with the peaks of the Roof Planks, and screw them down. Don't over tighten them!





8) PLACEMENT OF THE HIVE

At this point, you may want to move the hive to the location you have chosen for it on your property. It is a bit easier to carry the box, roof, and top bars separately, and then put them together on-site.

Place the Follower Boards in the Hive Body and set the thirty Top Bars in place. Insert corks into the entrance holes. You can store the spacers in the "attic" above the bars. Set the Roof on!

You're done! Good work!!!

HOW TO INSTALL A PACKAGE OF HONEYBEES INTO YOUR GOLD STAR TOP BAR HIVE.

What kind of bees do you need - to go into your Gold Star Top Bar Hive?

In an ideal world, you would capture a large, healthy swarm.

However, swarms are somewhat random events of nature, and you may or may not connect with one. So another method of obtaining bees is to purchase a "package" of "loose" bees. Package bees can be purchased, along with a queen bee, from a honeybee supplier. Gold Star Honeybees offers bees raised without chemical treatments.

Where this gets tricky is that to order bees, you need to plan far in advance—January is not too early to be buying package bees for shipment later in the spring. A swarm, on the other hand, is more of a "drop everything and run" event—likely in May or June. Great if you can get 'em. If not, you'll want to have purchased a package in advance.

These bees will arrive at your local post office in a shoebox-sized screen-sided crate-like box. The post office will call you asking you to (hurry!) come and get them! You will need to install them into your top bar hive as soon as possible—certainly no more than 24 hours after you have received them. They cannot live inside that package for long—they need to fly and to forage. When you bring them home, put them somewhere reasonably cool and dark.

Then this is what you do — you get prepared first, before you open the bee package! Here is what you need:

Some protective beekeeping equipment:

At Gold Star Honeybees, we prefer the jacket with the veil that zips on, since it's easy to get in and out of, obstructs less of our vision while we're working, and can be thrown in the washing machine on a regular basis, but there are other options, including full length bee suits, or helmet and veil combos with yards of rope to tie yourself into them. A pair of bee gloves is a very good idea too.

Your Gold Star Top Bar Hive - assembled and placed:

If you live where it snows in the winter, a sunny location is best. If your locale gets into the 90's frequently in the summer, and rarely snows in the winter, you will want a location with dappled sunlight, even some shade. Set up your hive with its front entrances (the three holes) facing generally south. Be very sure that the hive is sitting quite level, as the bees will build their honeycomb "plumb" i.e. straight up from the center of the earth, so if the hive is not level, the comb will not lift out easily when you go to inspect it.

Sugar Syrup:

Make some 1:1 sugar syrup. 1:1 syrup means a syrup made from mixing water and granulated white cane sugar in a mixture that is one part sugar to one part water, by weight. This recipe is one of the reasons you often hear beekeepers repeating the phrase "A pint's a pound the world around." What that means is that a pint of water weighs one pound—so that if you take one pound of sugar, and one pint of water (which is two cups) —you have created 1:1 sugar syrup. In slightly more logical (or at least American-sounding) units, that means ten cups of water and a five pound bag of sugar. This is for spring "emergency" feeding. Bees that come to you in packages have got no resources to work with, and no comb to begin storing nectar in. Making wax takes carbohydrates—so they will need to be fed in order to get them started, or they are likely to starve. Boil ten cups of water, take it off the heat, wait a few minutes, and then stir in five pounds of sugar until it's all dissolved. Voila! Bee "junk food"!

A spray bottle:

Put about a cup of your freshly made syrup in a clean spray bottle. Use this sugar syrup for spraying the bee's during the installation. Use the rest as bee food in your feeder kit.

A feeder kit:

There are several methods of making sugar syrup feed available to your bees—Gold Star Honeybees offers the plans to make a feeder system designed to fit securely into the Gold Star Top Bar Hive. If you've got one of these, you place the feeder tray into the hive, fill the one-quart Mason jar with the syrup, screw on the lid with the small holes in it, and then upend the jar. Wait a few moments until it ceases to drip and then set it into the blocks in your feeder tray. Or you can use this method: Fill a Ziploc bag with the syrup, rest it in a flat, shallow Tupperware-type container, and cut 3 or 4 slits in the top of the bag allowing the syrup to begin to ooze out. Set this in the bottom of the hive on one end.

Now set up your hive for the install:

Put your feeder tray into one end of the hive, against the end panel. Put the syrup jar on it.

Put ten top bars across the hive cavity above the feeder, and then the follower board that has the hole drilled in it. The bees will access the feeder through this hole in the follower board.

Put ten top bars across the hive cavity on the other side, then the follower board that has no hole in it. So what you have now is an open space ten bars wide, surrounded by two follower boards. You should have one front entrance hole open in the set of three—all the other entrances on the hive should have corks in them.

Gather up some helpful stuff:

Get a screwdriver or putty knife for prying. Get several thumbtacks for attaching the queen cage to a top bar. Have several on hand, since you will likely bend the first one. A sheetrock screw is often useful for removing the cork, if there is one, from the exit hole in the queen cage. So bring one of those, too. Another useful thing is a bottle of rubbing alcohol—we use this in case we get stung, since it does away with the alarm pheromone that is generated when a bee stings—that tells her sisters "sting here"! We just splash some on where the sting was and go about our business.

Get your protective gear on:

If you've got the jacket, pay particular attention to where the zippers all come together under your chin, and use the Velcro that is there to prevent any stray bees from getting inside your veil. It's smart to tuck your pants into your socks, too, and we know you're already wearing close-toed shoes, right? Put your gloves on last.

Now go get your package of bees:

Spray the bees lightly through the screen with the bottle of sugar syrup. This makes them sticky—which accomplishes several things. Firstly it distracts them from you, which you want. Secondly it gives them something to do—they will begin cleaning themselves up once you spray them. And thirdly, it makes it more difficult for them to fly. And since you want them to go inside the hive cavity and stay there until you get the top bars over them and the roof on, this is a pretty good method of doing that. HOWEVER: Do NOT spray your bees with anything at all – if the temperature is below 65 degrees out!

Next pry the lid from the top of the package of bees. Your goal is to remove the queen cage, and then the can of feed that came in the package. This is a little harder than it sounds. The queen cage usually sets in a small keyhole, and lifts right out. Sometimes the queen cage is down inside the cage, tucked tightly in next to the syrup/feed can. Look at the setup and act accordingly.

The round hole that the can of feed is set in is usually quite a tight fit. The best method we have found for getting it out is to push down on the side of the can next to where the queen cage is installed, then catch hold of the raised edge and lift it more or less straight out. Be patient and work carefully, there's no real hurry here. Once you've got the queen cage and the can out, set the lid back on over the hole you've made, to keep the bees inside.

There will be an exit hole in the end of the queen cage, filled with sugar candy. There will be a cover of some kind over this exit hole — and you must remove this cover! If it is a cork, it is a simple matter to use a screw to do this—poke the screw into the cork and pull it out. If it is a quarter of a metal can lid, you can bend it back. You may be able to use that to attach the cage to a top bar. Some queen cages come with thin metal strips attached that hold them in the package—these are also good for attaching the queen cage. Using whatever method seems reasonable—attach the queen's cage firmly to the beveled downward point of one of the remaining top bars, and hang it so the screen side is parallel with the bar. The bees will go to work to eat the candy in the exit hole, and release the queen over the course of the next several days.

Now for the big moment:

Give the bee's one last light spray with sugar syrup if it is warm enough to spray them. Then, pick up the package, holding the lid over the hole, and firmly "bonk" a corner of the package on the ground. This will cause the syrup-sticky bees to fall into a pile. Now pick up the box, take the lid away from the hole, and simply pour and shake the bees into that empty space in the hive that you prepared between the two follower boards. Thump on the box a bit to help knock the majority of the bees out of the box and into the hive. When most of them are in the hive, set the box with its stragglers beneath the hive. They will find their way in eventually.

Pick up the remaining ten top bars, and place them over the cavity you poured the bees into. Gently brush the bees out of the way. Make sure the bars touch. If there is extra space, and sometimes there is, since wood expands and contracts due to heat and moisture, then make sure the extra space is outside of the follower boards, and then fill it in with some of the ten spacers that come with your kit.

Next, set the gabled roof of the hive in place.

Now step back, and take a deep breath. If this is your first hive—Congratulations! You are now a beekeeper!

In 3-5 days open the hive, and take a look at the queen cage to be sure the queen has been released by the bees. If she has, you can now remove the queen cage. Refill the feeder if necessary, and keep your eye on the feeder until you notice that they have stopped eating the sugar syrup and are now foraging on plants and flowers instead.

Here are some pictures to help:



This is the hive with ten bars on each side, and a follower board—leaving an open space ten bars wide—where you will "pour" the bees.

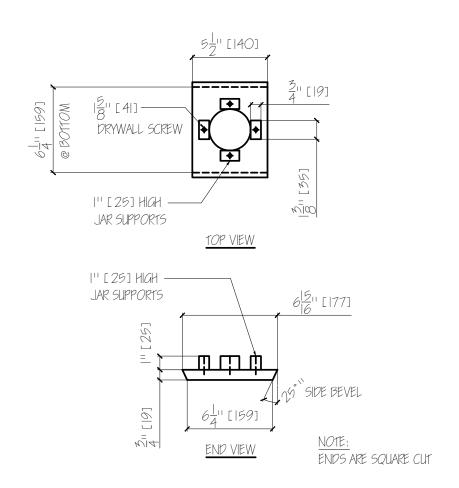


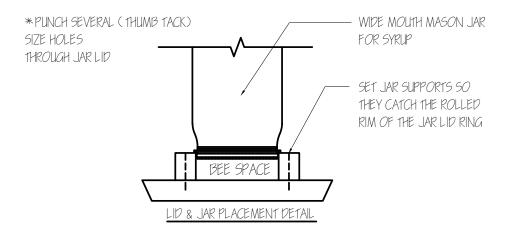
This is the feeder jar set in place—behind the follower board with the access hole in it.



This is a good place to be on a sunny summer day!

Enjoy your bees!





TRAY FEEDER FOR SYRUP