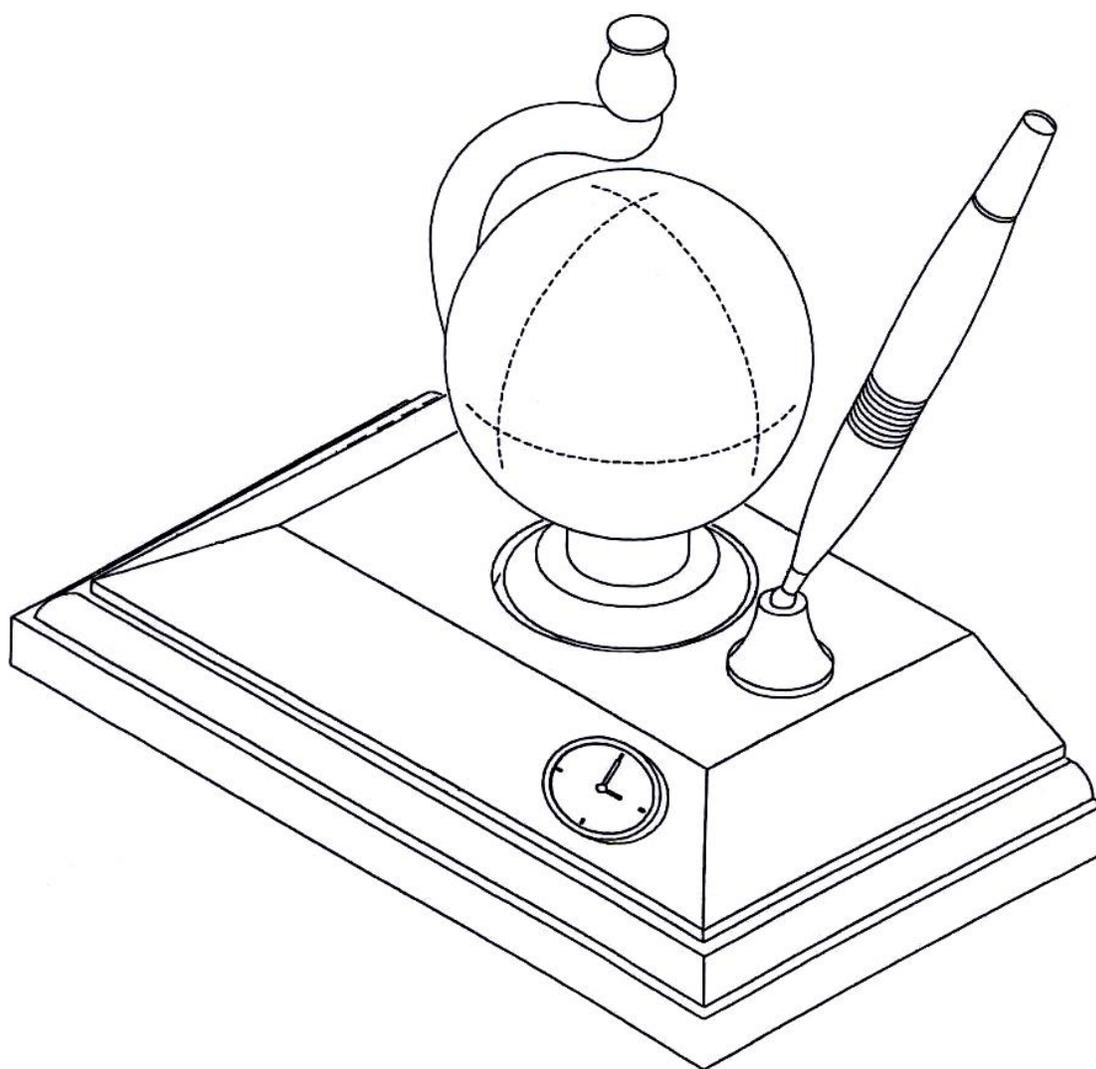


#496720
8/20/13

Plan and Assembly Instructions For
Forecaster Desk Set
#49672



Introduction: Thank you for purchasing the Forecaster Desk set plan. Please take time to thoroughly review the plan and assembly instruction materials before beginning work on the Forecaster Desk Set. If you should have any questions, concerns, or comments, please feel free to contact Klockit (1-800-556-2548).

Components: Required components to complete the Forecaster desk set are as follows: #32269 World Globe Strom Glass; #15700 (or #15701) Micro-mini Quartz Insert; #42026 Black pen/Funnel Set. You may optionally add the #44001 (or #44002) nameplate, however the nameplate is not required.

General Specifications: The following specifications mirror Klockit's engineering specifications for kit products produced for Klockit retail sale.

- Select clear grained, kiln dried lumber of your choice.
- All machined parts should be free of warping, cupping, end checks, and any other defects.
- All edges, mitre cuts, square cuts, holes, slots, etc. are to be true cut.
- Standard dimensional tolerances are +/- 1/32" (unless otherwise noted).
- Edge glued stock is generally permissible, however care should be taken to closely match color, texture, and wood grain to provide a solid wood appearance.
- Once machined parts have been completed, they should be sanded up to #150 grit. Finish sanding may be completed up to #220 grit in preparation for staining/finishing.
- All dimensions are listed in inches unless otherwise noted.
- Do not scale the drawings for dimensional verification.

Machining Notes: The various profiles (etc.) illustrated within this plan, can be achieved with the use of a table saw, router, and drill press. A 7/8" forstner bit (Klockit #53015) can be used for the insert counter-bore (see Item 1 – top plate). The 2-3/16" diameter counter-bore (Item 1) can be machined with a straight bit and router template. Total depth should be machined incrementally within (at least) 3 passes. A 1/4" radius beading bit will be required for the bottom plate (Item 2).

No matter what tools you should prefer to use, it is important to exercise proper shop safety (as per the instruction manuals included with your power tools). Also make certain to wear the recommended protective equipment (ear plugs, safety glasses, etc.).

Symbol Interpretation: Please refer to the information below for an explanation of the various symbols you will encounter within this plan.



- Stands for center line, indicating the centerline of a wood piece.



- Stands for diameter.



- Stands for Counter-bore. Generally a counter-bore can be achieved with a forstner or mutli-spur boring bit.

R – Stands for Radius.

THRU – Indicates that hole (etc.) will be drilled completely through the wood piece.

TYP. – Stands for "typical". "Typical" simply denotes that a certain dimension, radius, diameter, (etc.) will be repeated (but only when specified with TYP).

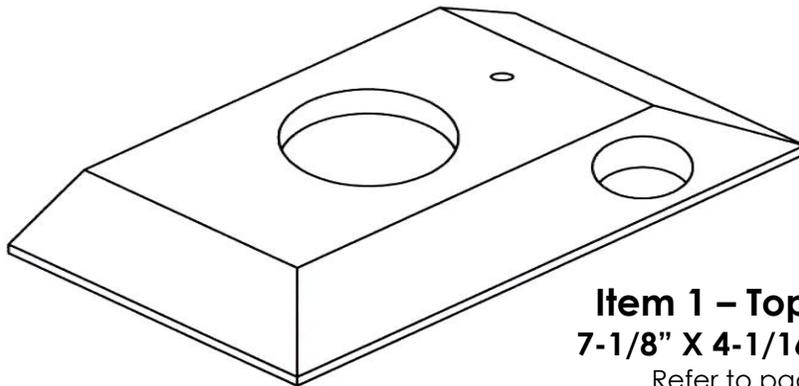
PLS. – Stands for "places". This abbreviation will simply denote the number of places a machining operation will occur.

HOLD – Indicates that a dimension should be exactly as specified (with no tolerance/variation).

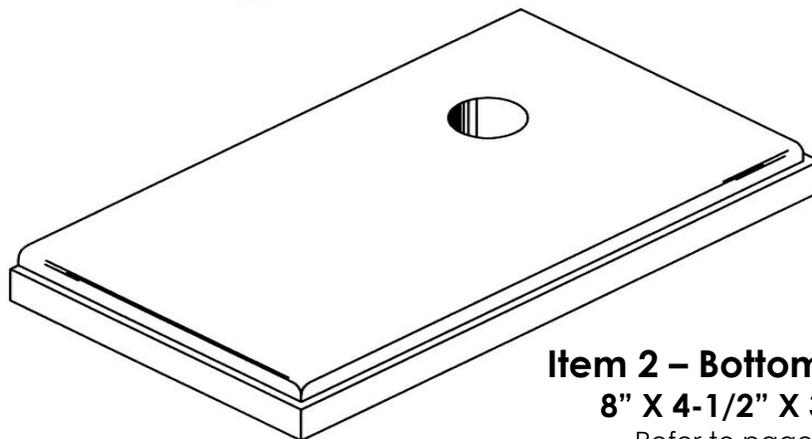
↔ - Indicates Wood Grain Direction

Before Machining: Please take time to review all wood parts to determine the lumber required to complete the Forecaster Desk Set. You may use the exploded assembly illustration for part reference and identification assistance. Each wood part drawing will provide finished dimensions, which can then be added to determine lumber requirements. You may also refer to overall part dimensions on this page. Please note that you should always figure excess lumber into your calculations (to account for saw cut thickness, possible wood defects, etc).

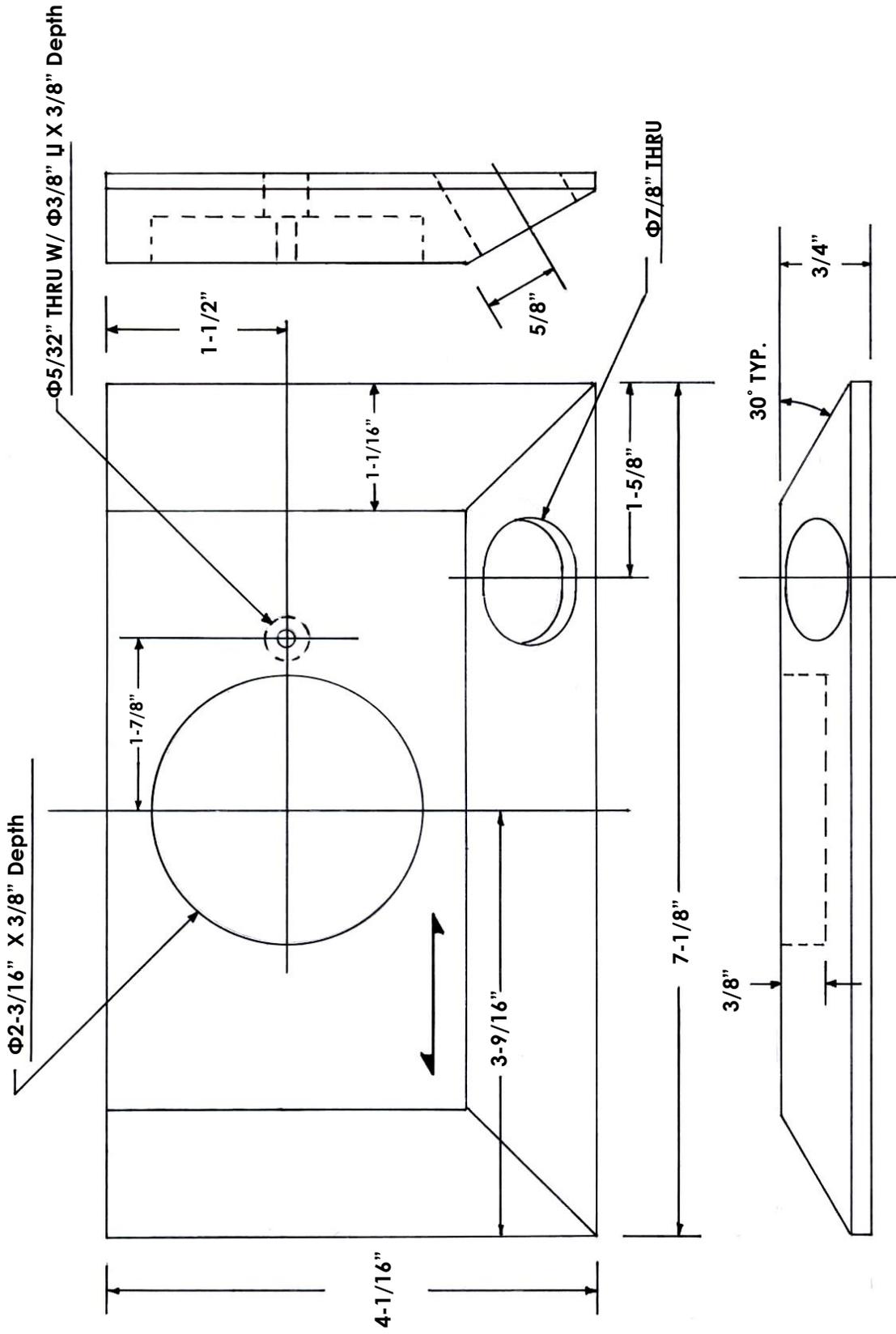
Upon completing machining of all wood parts, please refer to the assembly instructions and exploded view illustration to assemble your Forecaster Desk Set. If you should have any questions at any point prior to or during assembly, please feel free to contact Klockit technical support (1-800-556-6474). Please allow 24 hours (max) for a response.



Item 1 – Top Plate
7-1/8" X 4-1/16" X 3/4"
Refer to page 4



Item 2 – Bottom Plate
8" X 4-1/2" X 3/4"
Refer to page 5

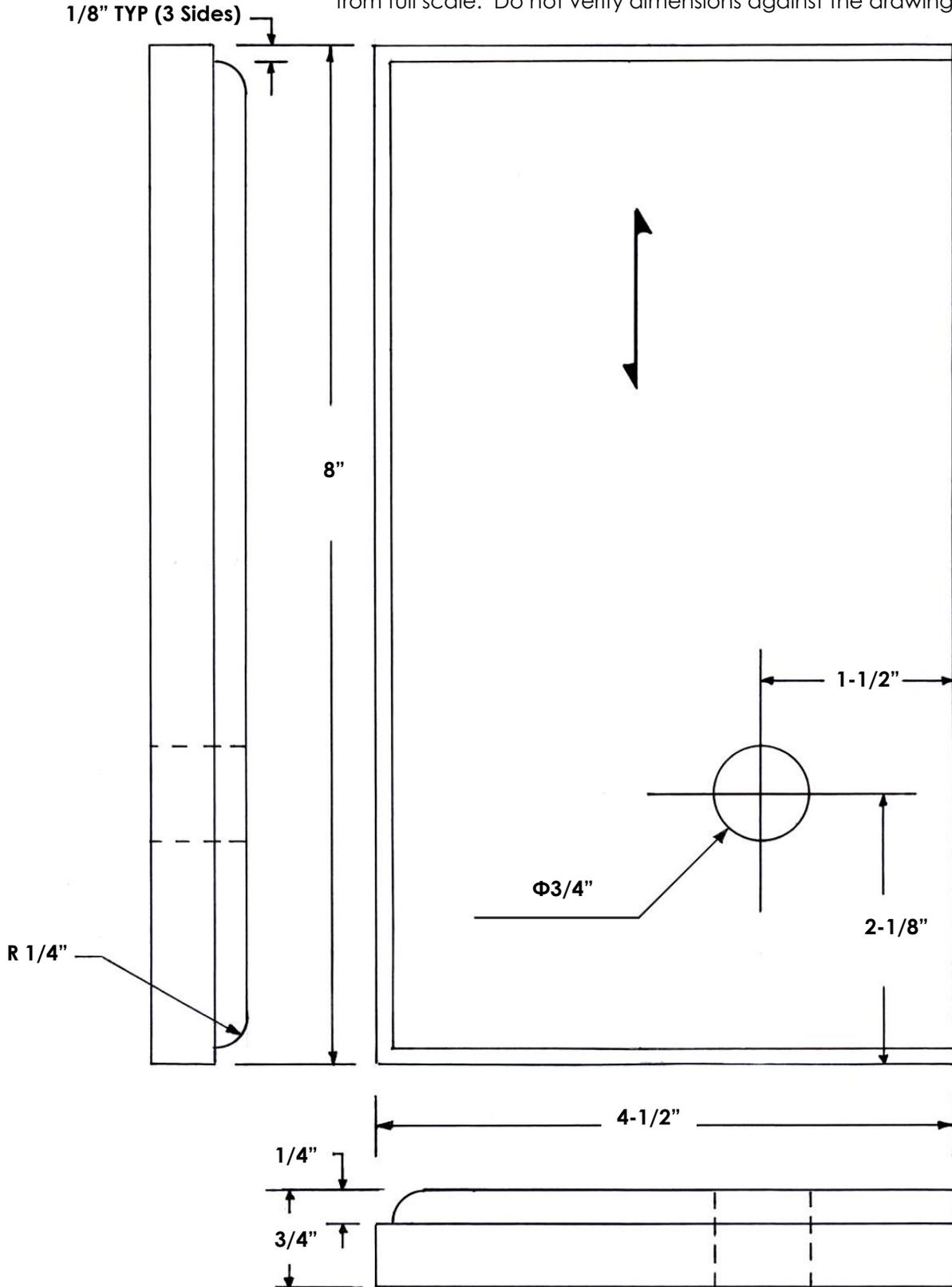


Item 1 – Top Plate

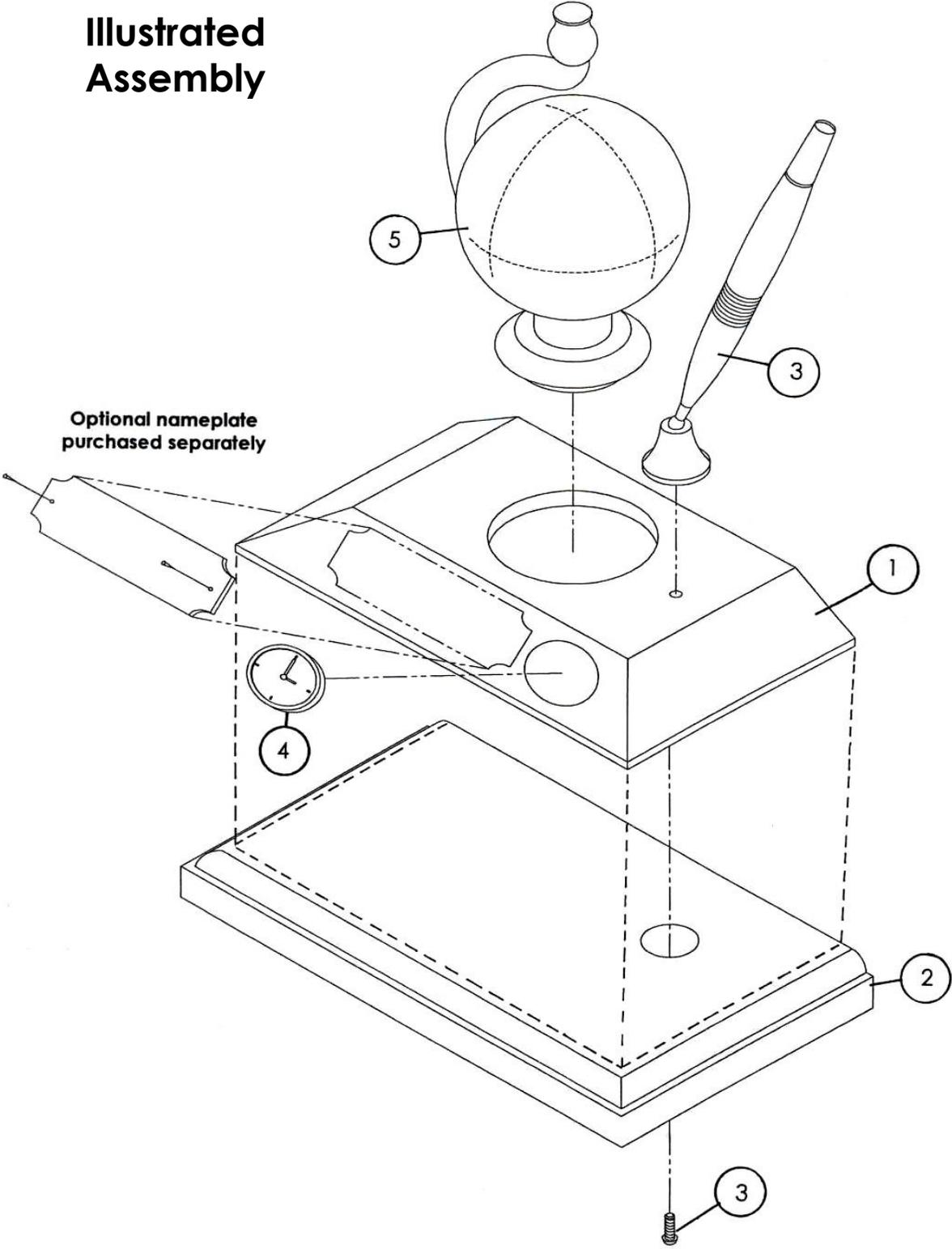
IMPORTANT: The plan construction drawings have been reduced from full scale. Do not verify dimensions against the drawings

Item 2 – Bottom Plate

IMPORTANT: The plan construction drawings have been reduced from full scale. Do not verify dimensions against the drawings



Illustrated Assembly



Assembly Step 1: Begin by identifying the top plate (Item 1) and bottom plate (Item 2). Temporarily place the top plate onto the bottom plate so that the top plate is centered side-to-side on the bottom plate, and so that the back edges of both parts are perfectly flush. Use a pencil to lightly trace an outline of the top plate onto the top surface of the bottom plate (Item 2). This will serve as a reference guide for gluing the two plates together.

Turn the top plate (Item 1) over so that the underside is facing up. Apply a thin layer of glue to the underside of the top plate, making certain to inset the glue about 1/8" from the edges to minimize excess glue seepage. Mount the top plate onto the bottom plate using your pencil outline as reference. Once again, ensure that the top plate is centered side-to-side, and make certain that the back edges of both parts are flush. Secure the assembly with clamping and remove any excess glue that may have seeped out during clamping. Set the assembly aside to dry (about 1 to 2 hours). Any remaining pencil mark lines can be lightly sanded away with 220 grit sandpaper.

Assembly Step Two (Wood Finishing) Take time to sand all wood parts with the grain, beginning with medium sandpaper and working your way up to the fine grit sandpaper. Utilize a sanding block on flat surfaces, and take special care while sanding the molded parts so as not to deform the profiles. Also, take additional care to sand the end grain edges. These end grain areas will tend to be more porous than the adjoining wood surface, resulting in darker stain pigmentation. It is also advised to take time to carefully inspect the assembly for any remaining traces of glue, making certain to sand these areas to remove all residue. Be sure to remove any sanding residue before applying your stain/finish to your clock.

There are numerous stains and finishes available on the market. Please take time to study and choose the best quality product that will provide you with the best results. Check the information labels of each product for information on penetration times, product compatibility, and general dry and "cure" times. **Hint:** It is excellent idea to experiment with stain/finish products on a scrap piece of wood, or an inconspicuous area of the wood assembly.

When applying stain and finish, be sure to work in a clean, warm, dry, well ventilated area. We recommend staining and finishing all wood surfaces in order to protect the assembly for years to come. If you are in-experienced with wood finishing, please consult with local product dealers and/or woodworkers in your area. They may have valuable information that will aid you with the stain/finish of your clock. You are also welcome to contact us by dialing our toll free technical assistance number (1-800-556-6474).

It is important that you always allow stain/finish coatings to dry thoroughly (typically 24-48 hours) before successive applications are added. You should always make certain that the final application is allowed the same thorough drying time prior to handling the case for final assembly.

Assembly Step Three: Once the final coating of finish has completely dried, you may complete the assembly of the Forecaster. Turn the assembly (from step one) over so that the underside is facing up and insert the screw from the pen and funnel set (Item 3) through the 3/4" hole in the bottom plate (Item 2) and through the 5/32" hole in the top plate (Item 2). Turn the assembly over and carefully thread the screw into the funnel base until the funnel is secure.

Next, carefully pull out the time set knob on the clock insert (Item 4). It will be located on the side of the insert at the 3'oclock position. Rotate the time set knob until the current

time is reached. Push in the time set knob to activate the insert. Push the insert into the mounting hole (located on the front surface of the top plate – Item 1). Make certain that the “12” and “6” o'clock positions are vertically plumb. Very carefully peel away the protective shipping film over the face of the clock insert.

To change the battery: When changing the battery, you will need to remove the insert from the mounting hole in the top plate. Vary carefully remove the back cover of the insert to expose the battery. When replacing the battery, please purchase SR626SW, and make certain that the positive side (+) is facing up. Replace the back cover, making certain that the notched portion of the cover is mounted over the time set knob shaft.

Assembly Step Four: All that remains is to prepare your world storm glass (Item 5). Begin by filling a container with distilled water (distilled water is recommended as it will not leave streaks on the glass). You may optionally use a couple of drops of food coloring to allow the water to be more visible in the storm glass. **Note:** It is best to perform this operation over a sink, as water could happen to overflow from the storm glass instrument.

Place the long injection tube onto the end of the syringe, and then fill the syringe with the colored water. Insert the injection tube into the spout of the storm glass (Item 5) so that the end of the tube stops just as it enters the glass chamber.

Important: Do NOT inject the syringe water at this time.

Holding the storm glass in one hand, and the syringe in the other, turn the storm glass up side down. Slowly inject the water into the chamber until it is about half full. Once half full, you may remove the injection tube from the spout. Turn the storm glass right side up and set it into the 2-3/16” diameter counter-bore in the top plate (Item 1).

Once the water comes to rest, check to make certain that the spout inlet hole is covered with water and the water level is about 1” up the spout (from the inlet hole). If the water is not at this level in the spout, fill the syringe with air and place the tube back into the water chamber. It is not necessary to turn the storm glass up side down; simply inject air into the chamber, and water will rise up the spout (once again, be cautioned that the water may overflow). Once you remove the injection tube, the water should be farther up the spout.

At this point, the water in the spout should immediately respond to any changes in barometric pressure. No adjustments are required once the glass has been filled. Please keep in mind that some evaporation may occur over time and require the addition of more colored water.

Reading The Instrument: Variations in barometric pressure are immediately indicated by the level of water in the spout. A **low** water level in the spout suggests “high pressure”, representing fair weather. A **high** water level in the spout suggests “low pressure” and forecasts poor weather conditions. In cases of severe weather (or major storms), the water may even run out of the spout.

How it works: There is “weight” associated with the high and low-pressure systems which bring about changes in the weather. When the storm glass is filled with water, air pressure in the main chamber is trapped and held constant. Any changes in the atmospheric pressure are visible by the rising or falling level of water in the spout. While the storm glass will not indicate exact barometric pressure in numerical values, it is still regarded as an accurate monitor of air pressure changes. Such changes can be visible on a smaller scale, as the instrument is sensitive enough to measure pressure changes between the attic and basement of a three-story house.

Conclusion: Congratulations on the completion of the Forecaster Desk Set! Whether you have built this assembly for your own use, to give as a gift to be cherished by someone special in your life, or even for resale, we hope that you are proud of the finished product.

Here at Klockit, we strongly believe that our customers are the real product designers. Our continued success at offering top quality kit and plan products that are fun, as well as rewarding to work with, depends on customer feedback and input. We sincerely welcome your comments and suggestions regarding our product designs, and/or our instruction materials, that will help us to improve our products.

Customer Machining, Assembly, and Finishing notes:

KLOCKIT

N3211 County Rd H.
Lake Geneva WI 53147
Customer Service: 1-800-556-2548
Technical Support: 1-800-556-6474