

# ASSEMBLY INSTRUCTIONS

MODEL 300 SERIES 82" x 19½" x 13"

# Our Guarantee

"Good Will and integrity, like a good name, is won by many acts... and lost by one."
While we always strive for perfection, there is still a very human world. If for any reason the contents of this box are imperfect, please notify us.

#### FULL ONE YEAR WARRANTY

All movements are superbly crafted time keeping instruments of the finest quality, made by Germany's finest clocksmiths. Each movement carries a full one year warranty. Obtain written authorization from factory for warranty repairs. Movements must be returned in original shipping cartons.

Robert H. Jaupeka

Robert H. Taupeka, President Emperor Clock Company, Emperor Industrial Park P. O. Box A-T Fairhope, Alabama 36532





# EMPEROR CLOCK COMPANY

EMPEROR INDUSTRIAL PARK

P.O. DRAWER A-T, FAIRHOPE, ALABAMA 36532 205/928-2316

# List Of Purchased Supplies

The following is a list of supplies you should have on hand before commencing assembly:

Glue — White Glue	8 0	z.	
Wood Dough — Mahogany, Walnut or Cherry	13/4	oz. T	ube
1" 17 Gauge Brads	Sma	all Box	
34" No. 8 Flat Head Wood Screws	. 8	124	10
11/4" No. 8 Flat Head Wood Screws	18	149	24
1½" No. 8 Flat Head Wood Screws	54		
Garnet Paper, Grade 100 and 150	. 2-3	Sheets	each
Glass for Hood and Waist Doors, Use doors for dimensions			

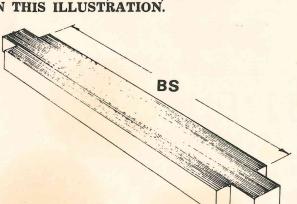
UNDERSTAND THE INSTRUCTIONS?
STUDIED THE FIGURES?
MATERIALS ON HAND?
THEN START

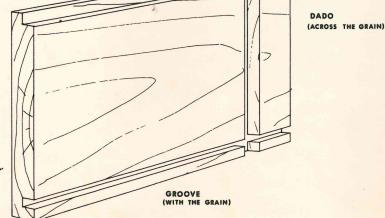
## INTRODUCTION

Before starting assembly operations all instructions should be read carefully for a general understanding of the overall process. It will be readily apparent that assembly starts with the base of the clock and proceed upward. Three major assemblies are involved, the Base, Waist and Hood. All of the wooden components for these assemblies are identified by a prefix letter B, W or H followed by numbers in sequence. After thoroughly reviewing the instructions you should segregate the parts into their respective assemblies. It helps at this stage to lightly pencil the part number on each piece as you identify it and check it off against the Master Parts List. Reference to Figures 3, 4, 7, Pages 10, 11 and 12, and the exploded view on Page 8 will aid in the identification of the pieces. While we take every precaution to insure complete packaging of each kit before shipment, mistakes can happen. If a part is missing or if you inadvertently damage a piece during assembly, please request by name and stock number for prompt shipment. Should you miscut a molding or collar, please provide us with a small sample piece to insure correct matching.

PRECAUTION: After glueing a joint, all excess glue must be thoroughly removed with a damp cloth from the outside of joints before it hardens. Any glue which remains on or in the grain of the wood in exposed areas will prevent the proper absorption of stain in later operations. The heads of all exposed nails or brads should be set with a punch and filled with properly matched wood dough as appropriate and sanded to conceal their locations. A note on sanding — the excellence of your final finish will directly reflect the care taken during the sanding. It is suggested that each piece be finished sanded on its exposed surface before being assembled. We suggest that Garnet Paper, Grade 100, followed by 150 be used for this purpose. Another note of caution — all parts have been factory cut with care. We have however in some instances, left a little excess material on a piece to insure that you can achieve close, snug fits by trimming to exact size. We strongly suggest, therefore, that each piece be trial fitted before final attachment to determine how much, if any, material must be trimmed. If you have any doubts as to how much material to trim off, use the cut and fit method, always cutting less than necessary until you remove that last tiny bit for a perfect fit. The use of the correct saw blade, well sharpened, will also help to insure clean, true joints without end chipping — most important on mitered joints. And last, but by no means least, check constantly as you proceed for squareness and trueness. You are not trying to duplicate the Leaning Tower of Pisa. The final product will directly reflect your care and skill during assembly.

FAMILIARIZE YOURSELF WITH THE TERMS RABBET, DADO, AND GROOVE IN THIS ILLUSTRATION.





300 Kit Hardware Included

2 ea. Tee Nuts and Screws for Sound Board

2 ea. Door Pulls and Back Plates with Screws

8 ea. Clamp Nails

2 ea. Hood Door Overlays

4 ea. Floor Levelers with plastic inserts

STEP #1 BASE ASSEMBLY (FIGURES 3 & 11, PAGES 10 & 14)

PARTS NEEDED: B-1 (base front assembly) B-6, B-7, B-8, B-9, B-10, B-11, B-12, and B-19.

SUPPLIES NEEDED: Glue, four clamp nails, two 3/4" wood screws, nine 11/2" wood screws, and 1" brads.

A. Attach the base front assembly, and the base sides (B-6 and B-7). You will notice narrow saw kerfs on the rear side of the base front assembly and the front edges of the base sides. These have been cut to receive the clamp nails as provided. See clamp nail detail, page 14. Starting with the base front assembly and either base side, run glue beads where the pieces will join, position the pieces vertically in their true position with the saw kerfs aligned and insure base sides are in their true position to permit later placement of the base back panel. Now drive a clamp nail, wide end first, into the saw kerf until flush with the surface. Turn the pieces over and drive another clamp nail into the other end. Attach the remaining side in a similar manner. Take care when driving your clamp nails to run them as straight as possible. When in place they exert a clamping action between the joining pieces. Clamp nails do not eliminate the requirement for external clamps, in all cases, because of the large pieces being joined together and the distance between clamp nails. Turn the assembled base onto its front and temporarily install the base lower rear cross brace (B-19) tacking with 1" brads to hold the base sides to the correct width, across the back, to match the front width. The base lower rear cross brace should be placed approximately halfway between the top and bottom edges of the back. Check for squareness and clamp. Check again for squareness after clamping and remove excess glue as directed by the glue manufacturer. NOTE: There are still some parts to be attached to the base. These will be attached later. Did you remember to sand the pieces before assembly? Have you removed all excess glue?

B. Place the base assembly face down, trial fit the front filler block (B-10) in its position centered between the base sides (B-6 and B-7) and flush with the top inside edge of the base front. Trial fit and install the side filler blocks (B-8 and B-9) to the inside top edges of the base sides and flush with the top edge of the base side. Be sure B-8 and B-9 will not extend too far toward the rear of the base and prevent the installation of the base back panel in a later step. Glue and screw B-10 by counter sinking three 1½" screws from the back side of B-10 into the base front. Likewise, glue and counter sink three 1½" screws through each B-8 and B-9 into the base sides. B-8, B-9 and B-10 thus will form a filler between the base and waist assemblies.

C. Install ledges (B-11 and B-12) by applying glue and nailing each with 1" brads against the bottom of each filler block (B-8 and B-9). B-11 and B-12 thus form a protruding ledge to hold waist assembly true. (Fctry assmb.)

D. The base lower rear cross brace (B-19) should now be permanently installed with glue and a 3/4" screw into each end across the bottom of the base back. A good practice to follow when installing screws is to drill and

4 ea. Plated Hinges

16 ea. Hinge Screws

1 ea. Bullet Catch/Hood Door

2 ea. Magnetic Catches for Waist Door with Striker and 2 Flat Head Screws

counter sink all screw holes to prevent wood from splitting and for appearance sake.

E. Rough sand the top of the base assembly and filler blocks level and flush as this will become a platform for the base collar in a later step.

STEP #2 WAIST ASSEMBLY (FIGURES 4 & 6, PAGE 11)

PARTS NEEDED: W-1, W-2, W-3 (waist front assembly) W-7 and W-8.

SUPPLIES NEEDED: Glue, four 1½" wood screws, and 1" brads.

A. Place the waist front assembly face down and trial fit sides (W-1 and W-2) against the back of the waist front for equal length. Insure that the rabbets along the rear of the waist sides face each other to accept the waist back in a later step. Note that the rabbet cut on the end of the waist side pieces must be flush with the rabbet on the waist front top rail. The waist sides (W-1 and W-2) have rabbets cut on both ends so that they can be used interchangeably. You need not trim the bottom rabbets to flush up the bottom edge of the waist front and waist sides because they will extend down into the base and rest upon the protruding ledge formed by B-11 and B-12 in the base assembly. See Section RR and Figure 11.

B. Glue and clamp W-1 and W-2 into position on the back of the waist front insuring that the edges and corners are flush. As with the base assembly, check front width and temporarily tack with 1" brads the upper waist cross brace (W-7) and the lower waist cross brace (W-8) across the back at each end to hold the front dimensions and for squareness. Check squareness, drill and counter sink a 1½" screw 1¼ inches from the top and bottom front edges of the waist front down into the waist sides. Check again for squareness after clamping. Use at least 3 clamps on each side. Remove excess glue and allow time for setting.

C. Trial fit the waist assembly into the grooves of the bottom side of the pre-assembled waist collar (W-12) to insure a proper fit at this time. The waist collar will be attached in a later step. The waist collar should fit flush at the rear of the waist side. Trim the rear of the collar if necessary to measure 12¾ inches.

STEP #3 HOOD ASSEMBLY (FIGURES 7, 8, 9 & 10, PAGES 12 & 13)

PARTS NEEDED: H-1, H-2, H-6, H-7, dial frame assembly (H-3) and pre-assembled waist collar (W-12). SUPPLIES NEEDED: Glue, four clamp nails, nine 1½" wood screws and 1" 'brads.

A. Trial fit hood sides (H-1, H-2) and dial frame assembly (H-3) into the grooves in the top side of the preassembled waist collar (W-12). The top of the dial frame must be flush with the bottom of the dado on the hood sides. Check for fit and squareness and trim if necessary. Be sure you do not install the dial frame upside down. Place glue along saw kerfs where the pieces join and start to connect the pieces by lightly driving in a clamp nail into the top of each side. A small piece of ½" plywood under the edge of the dial frame will compensate for the

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(Model 300)

Page 3

rabbet on the bottom of the hood sides while driving in the clamp nails. Drive home the clamp nails taking care not to hit and damage the hood side dados in the process. Turn the assembly over and drive the remaining clamp nails into the bottom saw kerfs. Here again, blocking under the top edge of the dial frame will help to support things while driving the clamp nails. See Clamp nail detail. (Page 14).

- B. Install the hood front cross piece (H-6). Glue the rabbets and insert in the hood side dado from the front with the top of H-6 flush with the top of the hood sides and flush with the front edges of the sides. Insert a 1½" screw into each end of H-6 from the outside of the hood sides. Be sure to counter sink the screw heads to allow the hood columns (H-19 and H-20) a flush fit against the hood sides as they are installed later.
- C. Temporarily install hood rear cross brace (H-7) approximately halfway between top and bottom of the hood sides to retain squareness and front dimensions. Use 1" brads.
- D. Turn the hood upside down and trial fit the preassembled waist collar assembly (W-12) on the hood. Trim the front rabbet on the hood sides on the bottom as required to obtain a flush fit in the rear of the hood sides and rear of the collar. Run a bead of glue along rabbets and insert two 1½" screws through the bottom of the waist collar down into each hood side. Insert three 1½" screws down into the dial frame front to pull the bottom of the dial frame flush with the top of the waist collar. See Figure 9. (Page 13).

STEP #4 INSTALL COLUMNS, REAR TRIM AND HOOD COLLAR

PARTS NEEDED: H-4, H-5, H-8, H-9, H-10, H-17, H-18, H-19, and H-20.

SUPPLIES NEEDED: Glue, eleven 1½" wood screws, and 1" brads.

- A. The front columns (H-19 and H-20) and the rear side trim pieces (H-4 and H-5) must be trimmed in length so that the top of each is exactly flush with the bottom of the dado on the inside of hood sides. Trim each piece as necessary so as to maintain a balanced appearance. Glue the front column 3/8 of an inch back from the front edge of the hood sides and clamp. Glue and attach rear trim pieces (H-4 and H-5) flush to rear edges of the hood sides. Clamp in place and allow glue to set. Figure 9 and 10, Detail E and F.
- B. Temporarily install the hood collar (H-8, H-9 and H-10). Before glueing into final position, check miters and mark and trim any excess from the ends of side pieces (H-9 and H-10). Make a trial fit and mark the location of the top of the columns where they meet the under side of the collar. Locate the center where the columns and collar meet and drill down through the collar into the column top and counter sink one 1½" screw into each column through the collar. Drill and counter sink two 1½" screws into each collar side and three 1½" screws into the front edge of the collar from inside the hood through H-6, toward the collar. Drill and counter sink one 1½" screw into the bottom of each column from the bottom of the waist collar as you did for the top of the column through the hood collar. Figures 9 and 10 Detail F.
- C. Before attempting the crown installation, spacer strips (H-16, H-17 and H-18) must be glued and nailed into place so that each rests on top of the hood collar and against the sides and front of the hood. Trim as necessary to fit. Crown will be assembled later. Figure 8 and Detail A. (Page 15).

STEP #5 ATTACH WAIST TO BASE (FIGURE 5, PAGE 11)

PARTS NEEDED: Glue, seven 1½" wood screws and two ¾" wood screws.

- A. Place the base assembly face down. Place the waist assembly face down inside the base assembly with the bottom end of the waist upon front filler block (B-10). Use support under the waist to hold it square to the base. Fit the waist snugly against the protruding ledge of B-11 and B-12. Check to see that the waist front and sides are in the same vertical line as the base front and sides. Counter sink one 1½" screw through the bottom of the waist front — centered left to right into the front filler block (B-10). Stand the waist and base vertically, side to side and front to back. Check to see that the waist front and sides are in the same vertical line as the base front and sides. If not quite true, the assembly can be trued by placing thin wood shims under the bottom edge of the waist as required. This is where you avoid the leaning tower appearance. NOTE: Shims may be needed between filler block (B-8 and B-9) and the waist sides for a snug fit. Place the shims before installing screws (Figure 11). Attach the waist to the base by placing two additional 11/2" screws through the bottom of the waist front into the front filler block (B-10). Naturally, the screws go from the inside to the outside. Counter sink two 11/2" screws through each waist side into the side filler blocks (B-8 and B-9). Figures 1, 5, and 11. (Pages 8, 11 and 14).
- B. Lower waist cross brace (W-8) should now be permanently installed. Note the location carefully on Detail C. The lower portion of the waist rabbet is chiseled flush with the top of the base filler blocks so that the base back panel will fit. Attach W-8 with glue and a ¾" screw on each end. Trim & chisel the waist side rabbets the length of the filler blocks to permit later installation of the base back panel. (Detail C, Page 15, and Figure 11, Page 14).

STEP #6 INSTALL FOOT AND TRIM MOLDINGS (FIGURE 11 AND SECTION RR, PAGE 7)

PARTS NEEDED: B-13, B-14, B-15, B-16, B-17, B-18, B-19, B-20, B-21, B-22, B-23, B-24, B-25, B-26 & B-27

SUPPLIES NEEDED: Glue, seven 11/4" wood screws, ten 11/2" wood screws, 1" brads.

A. Now we use the rest of the Base parts and we come to the first slightly tricky part. You get a chance at cutting miters. First we'll work on B-13, B-14, and B-15 (the foot moldings) and if you remember the cut and fit business it will all come out fine. You will note that B-13 (front foot molding) must have a 45 degree miter on each end and that B-14 and B-15 must each be-mitered on one end to match B-13 in the neat mitered corner joints. The first trick is the location of the miters on each piece to insure that the respective pieces, when in place, will center up on the front and sides to insure that the cut out detail on the moldings will not be shifted off center, giving an awkward appearance. The simple solution is to locate the horizontal centers of the base front and sides and the geometric centers of B-13, B-14, and B-15 (i.e., the center where the piece balances out left and right in respect to the cut out detail). A small note: When figuring the center of the sides (B-14 and B-15) don't forget to add 34" to the front end (the thickness of B-13). Lay the assembled Base and Waist on its back and locate and lightly pencil a mark on the left to right center of the base front assembly. Locate and lightly pencil a mark on the left to right center of the top edge of the front foot molding (B-13). Align your marks and cut a miter on the right end of the front foot molding. Locate the right foot molding B-15 by placing it on the side center point. Mark the location of the miter on its left end and make the cut. Fit the miters of B-13 and B-15 for a neat fit. Repeat this operation with the left side. Miter the left end of the front foot molding (B-13). Locate the left foot molding (B-14) making the miter cut on its right end. If in doubt always cut leaving a little excess and cut again to fit. Make a final trial fit and mark the excess to be trimmed from the rear ends of B-14 and B-15. Trim excess flush with the base back Figure 11.

- B. Glue and nail B-13, B-14, and B-15 in place with 1" brads. Set the brads. CAUTION make certain that the top edges of the grooves in B-13, B-14, and B-15 are flush with the bottom edges of the base sides so that the plywood base bottom B-27 can slide in. Now turn the case onto its front and install 1¼" wood screws from the inside of the base into the foot moldings three into B-13 and two each into B-14 and B-15. Slide the plywood base bottom panel (B-27) into grooves of B-13, B-14, and B-15. Figure 11.
- C. With the case still in the same position install the floor leveler blocks (B-26). All blocks are installed with the hole in a vertical position. Place two in the front with the hole nearest B-13 and flush with the bottom edges of B-14 and B-15. Place two in the rear, flush with the rear ends of B-14 and B-15 and flush with their bottom edges. Holes should be nearest the rear. Attach with glue and insert one 1½" screw through leveler block up into the base side. (Figure 11).
- D. Stand the case upright and mark and miter the small trim molding (B-23, B-24 and B-25) which will be installed on top of the foot moldings for finish trim. Glue and tack in place with 1" brads. Trim the rear ends of the side trim moldings flush with the back before installing. (Figure 11).
- E. Trial fit the base collar (B-16, B-17 and B-18) around the waist on top of the base assembly. Check miters and mark and trim excess from the ends of side pieces (B-16 and B-17). Apply glue and insert screws into the base assembly using 1½" wood screws two in front and two into each side.
- F. Now for one more trick installing the base to waist moldings (B-20, B-21 and B-22). This step will be repeated again so get it "down-pat" now! B-20, B-21 and B-22 must have compound miters for a proper fit at the front corners. Line up all the cove molding, end to end, to make sure of your cut. There is an up and down side to this molding as each edge is of a different curvature. Excellent results can be obtained by holding the pieces at their proper 45 degree angle against the fence of a radial arm saw and make a simple 45 degree miter. After mitering, check for fit and mark and trim the end excess on side piece flush with the back. Glue and tack in place with 1½" brads or 4 penny finishing nails. Use bees wax or soap for easier nail driving. Make sure thick rounded edge of molding is toward base.

Figure 11, Page 14).

(Model 300)

STEP #7 INSTALL HOOD - WAIST COLLAR ASSEMBLY TO WAIST (FIGURES 2 AND 8, PAGES 9 AND 13)

PARTS NEEDED: Assembled hood and waist collar, W-7, W-9, W-10 and W-11.

SUPPLIES NEEDED: Glue and four 1½" wood screws.

A. Trial fit the waist collar and hood assembly to the waist sides. Insure that the grooves in the collar line up at the corners for a proper fit on the waist sides and front. Check for squareness and joining, by placing the

pieces in their final position. NOTE: The detail on figure 8 (Hood Construction) where upper waist cross brace (W-7) joins with the ends of the collar, pieces should be trimmed, if required, before actually placing and screwing down of the hood and waist collar assembly. (Detail B, Page 15).

B. Remove hood-collar assembly and run glue beads along the waist rabbets. Attach the hood-collar assembly and counter sink two 1½" wood screws through each collar side down into the waist sides. Do not nail or screw into waist front.

C. Turn the case upside down so that it rests upon the hood collar. Install waist to hood cove moldings (W-9, W-10 and W-11) in exactly the same manner as the base to waist cove moldings and position the thick edge toward the hood this time. (Figure 8, Detail B)

STEP #8 CROWN AND SOUND BOARD (FIGURE 8 AND DETAIL D AND G)

PARTS NEEDED: H-7, H-11, H-12, H-13, H-21, H-24, H-25, H-26, H-27, H-28 and H-29.

SUPPLIES NEEDED: Glue, eleven 1¼" wood screws, two ¾" wood screws, 1" brads and two T-nuts.

- A. H-11, H-12, and H-13 (Crown front and crown returns): These assemblies must be mitered at the corners for correct fit. Proceed as in other miter operations taking care that H-11 is mitered equally from the center. Insure the spacer strips (H-16, H-17 and H-18) are already in place (step 4C). Trial fit before glueing into place and attach with 1¼" wood screws from the inside of the hood sides and front. Install two screws for each side piece and three in front through H-6.
- B. Install H-23 (crown overlay) centered on the crown front. Glue and tack into place with 1" brads.
- C. Insert the plywood hood top (H-29) and install hood rear cross brace (H-7) using glue and two 3/4" wood screws. (Detail A and D, Pages 7 and 15).
- D. Trim molding (H-27 and H-28) must be installed at the junction of the hood sides and hood collar be<sub>5</sub> tween the hood columns (H-19 and H-20) and the rear side trim pieces (H-4 and H-5). This is a cut and fit operation to insure a snug fit. Glue and tack with 1" brads. (Figure 10).
- E. Install H-24, H-25 (sound board mounting blocks) 13/16 inches in from the extreme rear of the hood side and 1/16 inches below the forward edge of the bottom of the rear cross brace (H-7, Detail D). Allow ¼" for back hood panel, ½" for the sound board, and 1/16 inch between the hood panel and the sound board. First, however, install the T-nut inserts into the single hole side of the blocks. Glue and attach to the inside of the hood sides with 1¼" wood screws through the pre-drilled holes. Be sure that the large end of the T-nuts face to the front for later mounting of the sound board. (Detail F).
- F. The finial (H-21) should be installed loosely for easy removal when necessary to move the case.

STEP #9 HOOD AND WAIST DOOR INSTALLATION (DETAIL E AND F)

PARTS NEEDED: Hood door assembly (H-31) and waist door assembly (W-17) and door catch blocks (W-15 and W-16).

SUPPLIES NEEDED: Glue, two ¾" wood screws, and 1" brads.

A. The actual permanent hanging of the door should be delayed until all finishing operations have been completed. You should, however, hang them temporarily at

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this time to check door fits, hinge and latch locations and location of door pulls and trim.

B. The hood door may require trimming at the top and bottom for clearance between waist and hood collars. Trim to maintain the balance of the door using the dial frame assembly as your guide.

C. For ease of door hanging, lay the case upon its back so that the doors will lay in position without falling. Hinges should be attached to the right side of the doors, two inches from each end. Place the doors, with hinges attached, into their respective position. Check for clearance and mark location of screw holes in the hood and waist members. Attach with hinge screws as provided. Hinges and doors are designed so as to require no recessing into the wood.

D. Install the magnetic door latches in the holes provided in W-15 and W-16. Place these inside the waist of the case to determine the amount of notching or recessing necessary for proper door closing. Line up the round brass plate (striker for magnetic catch) with the magnetic catch and install on the waist door using flat head screws as provided. Recheck alignment and depth of cut needed for W-15 and W-16. Notch out W-15 and W-16 and install, using glue and 34" wood screws at the top and bottom of the waist front assembly. Section RR, (Page 7).

E. Locate the "latch" for the bullet assembly about 1" from the left edge and on the bottom of the hood door. The latch will have to be set into the bottom of the door flush with the bottom. Attach with small brass brads (furnished). Mark the location of the bullet after the latch is installed. Drill hole and install bullet. See Detail E (Page 15).

F. Remaining hardware for the doors should be left off until final finish has been applied. The installation of glass should also be withheld until finishing is complete. Install glass with the 1/4" round plastic extrusion that is provided, using staples or small brads.

G. Sound board drilling and chime rod installation instructions are included with clock movement.

H. The base back (B-28) may be installed using 1" brads. It is suggested that the waist and hood backs await installation of the clock movement. The hood back (H-30) should be held in place with four small swing catches and the waist back (W-18) with 1" brads.

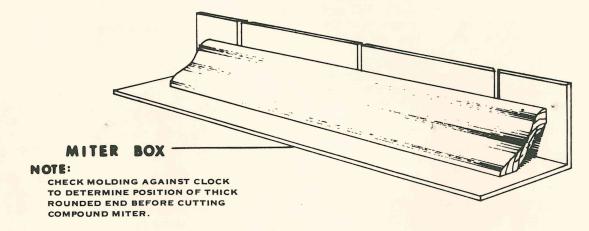
I. The hood side panels (H-22) are designed to be removable from the side of the clock case. They are installed by first placing the top of the panel (identified by the deep cut) into the hood side. The hood panel is pressed flush to the hood side and allowed to drop and lock into position. These removable panels provide easy access for silencing or adjusting the movement.

FINISHING: Despite your utmost care there are bound to be small cracks in some joints which will be unsightly after the finish is applied. Here's how to give your product the professional touch. As mentioned in the beginning, all exposed nail heads should be set (punched in) and the holes resulting filled with Wood Dough. Wood Dough should also be used to fill all exposed cracks. After the dough has set up a few hours, sand off the residue with Grade 150 Garnet paper. As with glue, any dough remaining in areas around filled holes and cracks will reduce the absorption of stains — so sand it all off leaving just the filler in the cracks. Go over the entire case carefully correcting all surface defects, spots or glue, etc. Resand where necessary. A good sanding job cannot be stressed enough for any spots that are missed will be easily seen when the stain is applied. Before staining, however, you should go over the entire case to remove all dust. A soft brush will help, as will the brush on your vacuum sweeper. A final wipe down with a Tac rag (get it at any paint store) will remove all dust.

The staining, we leave to you, as to your choice of type, color and finish. So much has been written on these subjects that any effort on our part would be completely superfluous. If you have any questions we suggest that you refer to any of dozens of booklets and pamphlets on the subject.

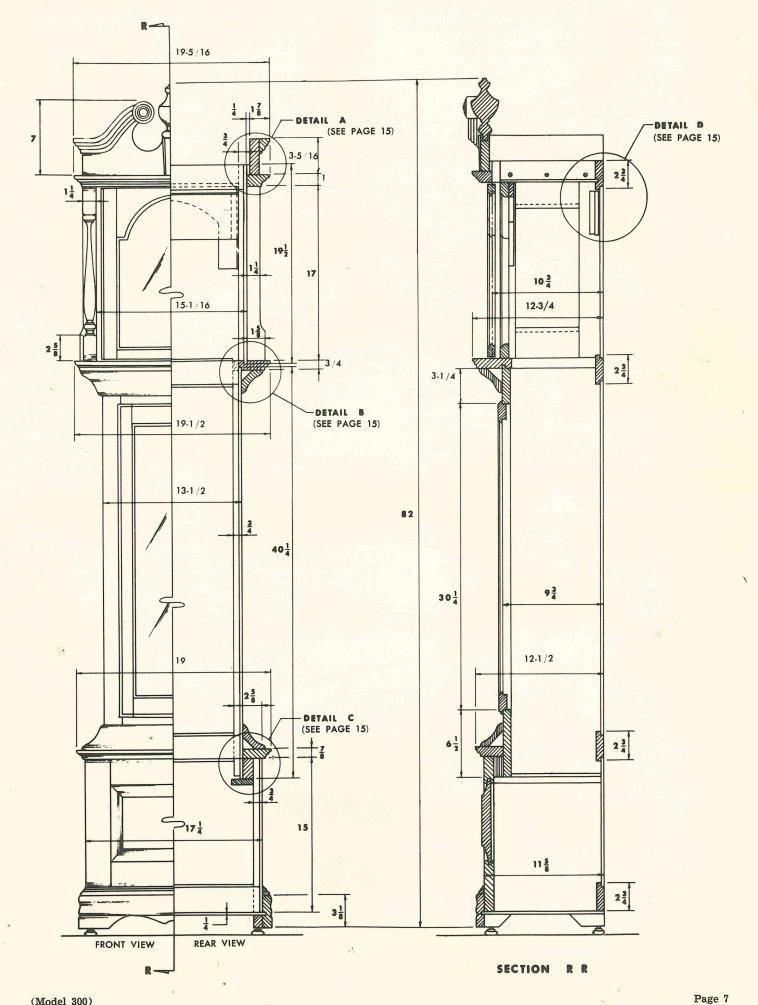
The pendulum stick may be finished, or not, as you prefer. The movement mount (H-32) and the dial board (H-33) may be stained if desired. See the movement installation and operating instruction booklet for their use.

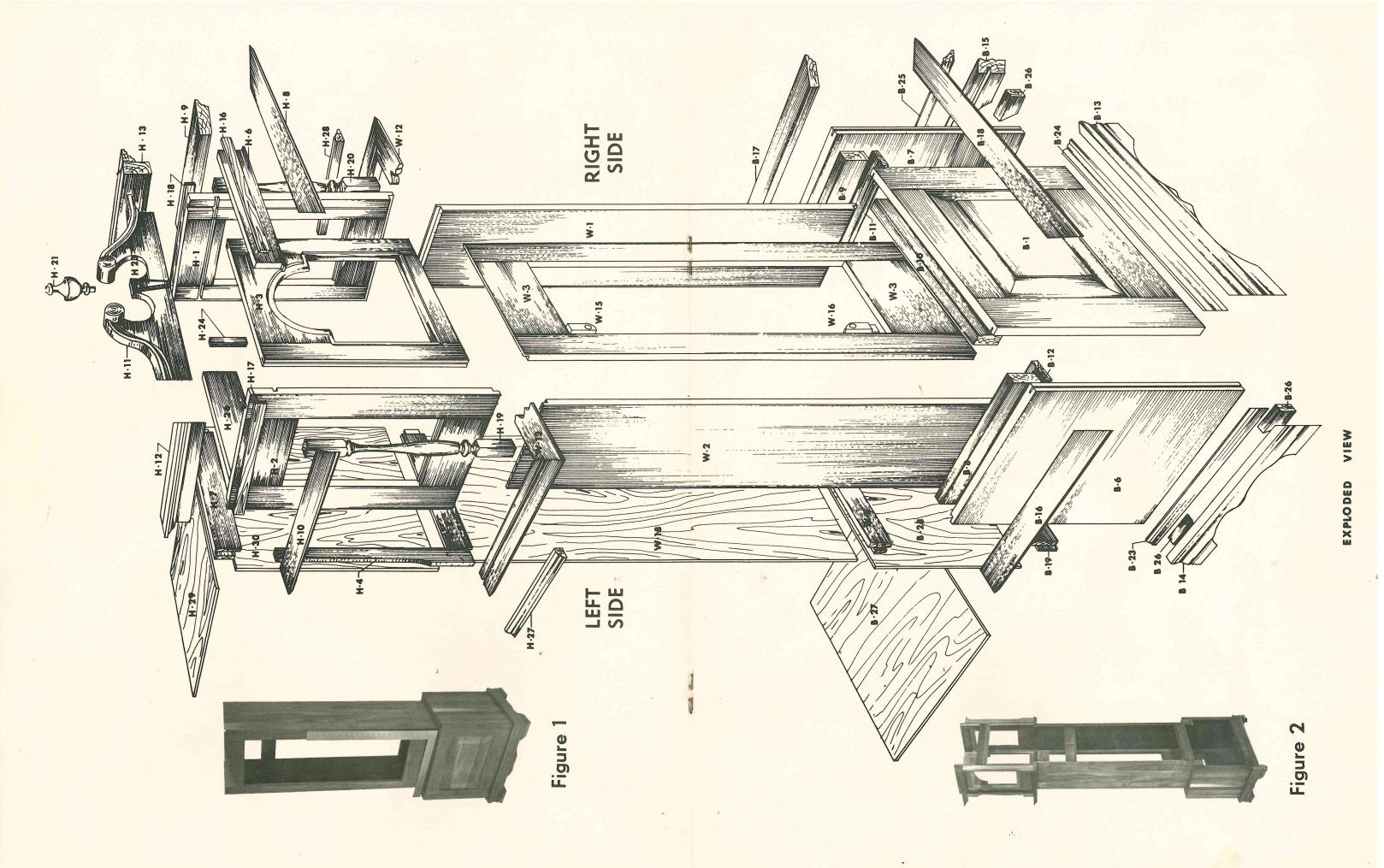
A FINAL NOTE — We recommend that you stain the interior of your case for appearance sake and we also recommend that you apply a coat of lacquer or varnish to the inside to seal the wood from moisture.



# NOTE:

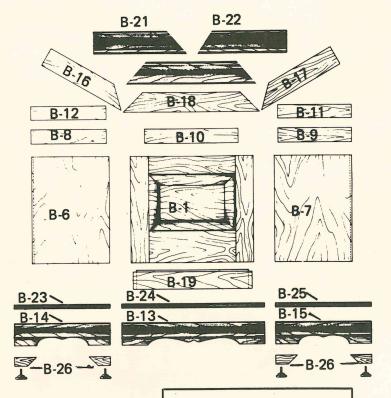
WHEN ORDERING REPLACEMENT PARTS LEFT OR RIGHT SIDES ARE DISTINGUISHED BY LOOKING AT THE FRONT OF THE CLOCK.





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### FIGURE 3: BASE PARTS





All front to rear mitered pieces have been cut slightly overlength to permit some sanding to mitered

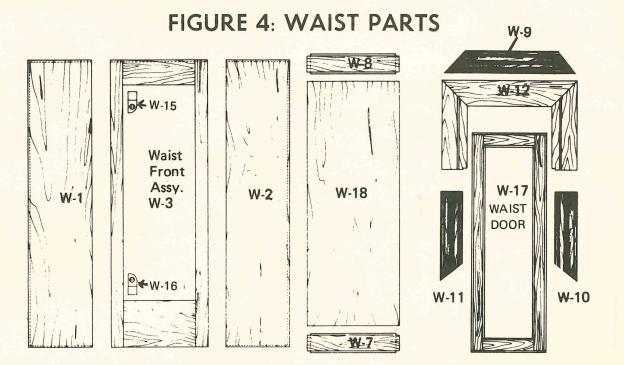


corners for neat fit before flushing at the rear of the clock case.

NOTE: SP is short point dimension BS is between shoulders See illustration page 2

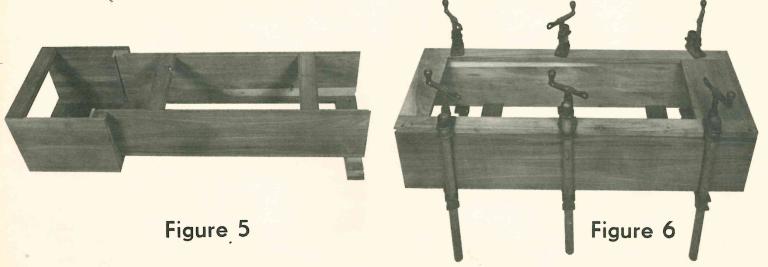
To Order Component Parts, Always Use Part Name And Stock Number For Walnut, Mahogany Or Cherry

į.	2220 1121/2		***********	THICK-	WALNUT		MAHOGANY STOCK NO.		CHERRY	UNIT
- /	PART NAME		WIDTH	NESS	STOCK NO.				3KC-B1	\$14.00
B-1	BASE FRONT ASSEMBLY		17-1/4	3/4	3KW-B1	\$14.00		\$14.00		
B-6	BASE, Left Side		10-7/8	3/4	3KW-B6	8.50	3KM-B6	7.25	3KC-B6	8.50
B-7	BASE, Right Side		10-7/8	3/4	3KW-B7	8.50	3KM-B7	7.25	3KC-B7	8.50
B-8	FILLER BLOCK, Left Side	10-9/16	2	1-3/32	3KW-B8	1.00	3KM-B8	1.00	3KC-B8	1.00
B-9	FILLER BLOCK, Right Side	10-9/16	2	1-3/32	3KW-B9	1.00	3KM-B9	1.00	3KC-B9	1.00
B-10	FILLER BLOCK, Front	12	2	1-3/32	3KW-B10	1.00	3KM-B10	1.00	3KC-B10	1.00
B-11	BASE STOP, Right Side Attached to B-9	10-9/16	1-7/8	1/4	3KW-B11	1.00	3KM-B11	1.00	3KC-B11	1.00
B-12	BASE STOP, Left Side Attached to B-8	10-9/16	1-7/8	1/4	3KW-B12	1.00	3KM-B12	1.00	3KC-B12	1.00
B-13	FOOT MOLDING, Front	17-9/32 SP	3-1/8	3/4	3KW-B13	4.50	3KM-B13	4.25	3KC-B13	4.50
B-14	FOOT MOLDING, Left Side	11-7/8 SP	3-1/8	3/4	3KW-B14	3.50	3KM-B14	3.35	3KC-B14	3.50
B-15	FOOT MOLDING, Right Side	11-7/8 SP	3-1/8	3/4	3KW-B15	3.50	3KM-B15	3.35	3KC-B15	3.50
B-16	BASE COLLAR, Left Side	10 SP	2-3/4	7/8	3KW-B16	2.75	3KM-B16	2.75	3KC-B16	2.75
B-17	BASE COLLAR, Right Side	10 SP	2-3/4	7/8	3KW-B17	2.75	3KM-B17	2.75	3KC-B17	2.75
B-18	BASE COLLAR, Front	13-17/32 SP	2-3/4	7/8	3KW-B18	4.50	3KM-B18	4.25	3KC-B18	4.50
B-19	BASE-LOWER REAR CROSS BRACE	15-3 /4 BS	2-3/4	3/4	3KW-B19	1.00	3KM-B19	1.00	3KC-B19	1.00
B-20	BASE TO WAIST MOLDING, Front	13-17/32 SP	3-1/8	3/4	3KW-B20	4.50	3KM-B20	4.25	3KC-B20	<b>4.50</b>
B-21	BASE TO WAIST MOLDING, Left Side	10 SP	3-1/8	3/4	3KW-B21	3.50	3KM-B21	3.35	3KC-B21	3.50
B-22	BASE TO WAIST MOLDING, Right Side	10 SP	3-1/8	3/4	3KW-B22	3.50	3KM-B22	3.35	3KC-B22	3.50
B-23	TRIM MOLDING, Left Side	11-7 /8 SP	9/16	9/16	3KW-B23	1.25	3KM-B23	1.25	3KC-B23	1.25
B-24	TRIM MOLDING, Front	17-9/32 SP	9/16	9/16	3KW-B24	1.50	3KM-B24	1.50	3KC-B24	1.50
B-25	TRIM MOLDING, Right Side	11-7/8 SP	9/16	9/16	3KW-B25	1.25	3KM-B25	1.25	3KC-B25	1.25
B-26	FLOOR LEVELER BLOCKS X4	TOP 3" BTM. 11/4"	1-1/4	3/4	3KW-B26	.50 e	a. 3KM-B26	.50 ec	. 3KC-B26	.50 ea.
B-27	BASE BOTTOM PLYWOOD	18	12	1/4	3KW-B27	1.50	3KM-B27	1.50	3KC-B27	1.50
B-28	BASE BACK	16-3/4	12-1/2	1/4	3KW-B28	3.50	3KM-B28	3.35	3KC-B28	3.50
	HARDWARE KIT (for Model 300)	, ,		*		13.50		13.50		13.50



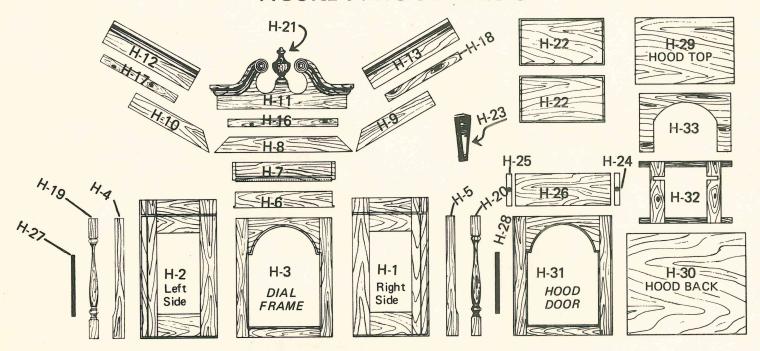
To Order Component Parts, Always Use Part Name And Stock Number For Walnut, Mahogany Or Cherry

	PART NAME	LENGTH	WIDTH	THICK- NESS	WALNUT STOCK NO.	UNIT PRICE	MAHOGANY STOCK NO.		CHERRY STOCK NO.	UNIT PRICE
W-1	WAIST, Right Side	40-1/4	9	3/4	3KW-W1	\$22.50	3KM-W1	\$20.00	3KC-W1	\$22.50
W-2	WAIST, Left Side	40-1/4	9	3/4	3KW-W2	22.50	3KM-W2	20.00	3KC-W2	22.50
W-3	WAIST FRONT ASSEMBLY	40-1/4	13-1/2	3/4	3KW-W3	8.50	3KM-W3	7.25	3KC-W3	8.50
W-7	UPPER REAR WAIST CROSS BRACE	12 BS	2-3/4	3/4	3KW-W7	1.75	3KM-W7	1.75	3KC-W7	1.75
W-8	LOWER REAR WAIST CROSS BRACE	12 BS	2-3/4	3/4	3KW-W8	1.75	3KM-W8	1.75	3KC-W8	1.75
W-9	WAIST TO HOOD MOLDING, Front	13-17/32 SP	3-1/8	3/4	3KW-W9	4.50	3KM-W9	4.25	3KC-W9	4.50
W-10	WAIST TO HOOD MOLDING, Left Side	10 SP	3-1/8	3/4	3KW-W10	3.50	3KM-W10	3.35	3KC-W10	3.50
W-11	WAIST TO HOOD MOLDING, Right Side	10 SP	3-1/8	3/4	3KW-W11	3.50	3KM-W11	3.35	3KC-W11	3.50
W-12	WAIST COLLAR ASSEMBLY	19-1/2	12-3/4	3/4	3KW-W12	10.00	3KM-W12	10.00	3KC-W12	10.00
W-15	DOOR CATCH BLOCK TOP	3-3/4	1-1/4	3/4	3KW-W15	.75	3KM-W15	.75	3KC-W15	.75
W-16	DOOR CATCH BLOCK BOTTOM	3-3/4	1-1/4	3/4	3KW-W16	.75	3KM-W16	.75	3KC-W16	.75
W-17	WAIST DOOR ASSEMBLY	30-3/4	10-7/16	3/4	3KW-W17	10.00	3KM-W17	8.75	3KC-W17	10.00
W-18	WAIST BACK PLYWOOD	34-3/4	13	1/4	3KW-W18	6.50	3KM-W18	5.75	3KC-W18	6.50



NOTE: DIMENSIONS GIVEN ARE MEANT AS AN AID TO IDENTIFICATION ONLY SOME VARIATIONS MAY OCCUR AND TRIMMING MAY, OR MAY NOT, BE REQUIRED.

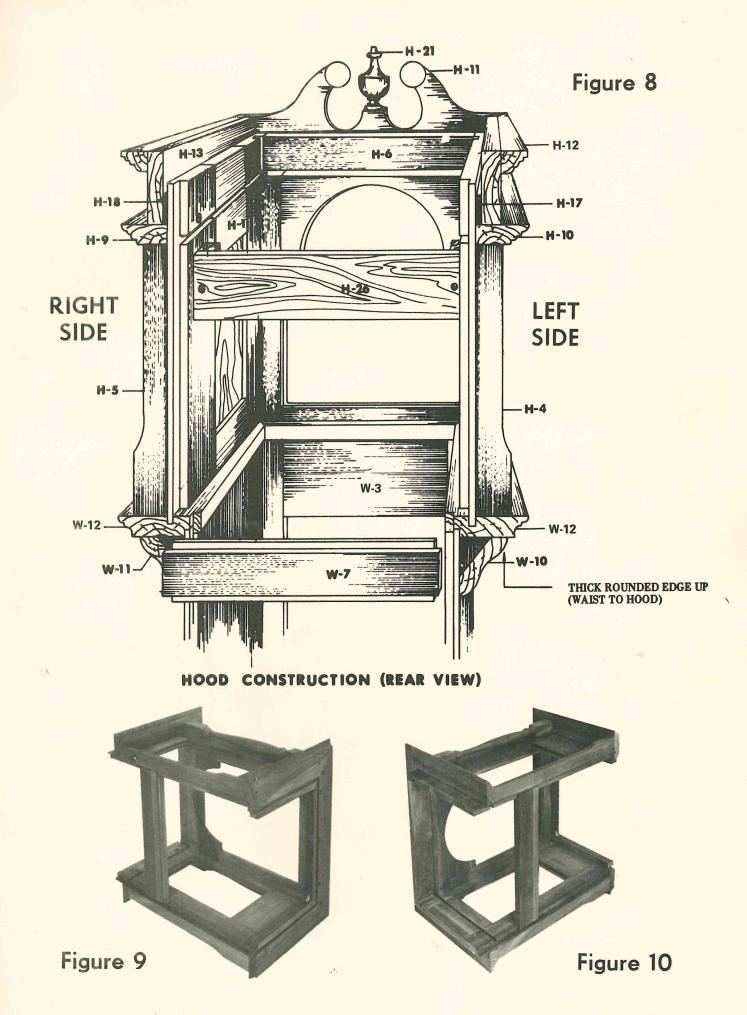
## FIGURE 7: HOOD PARTS



NOTE: See Movement Booklet For Use Of H-32 And H-33

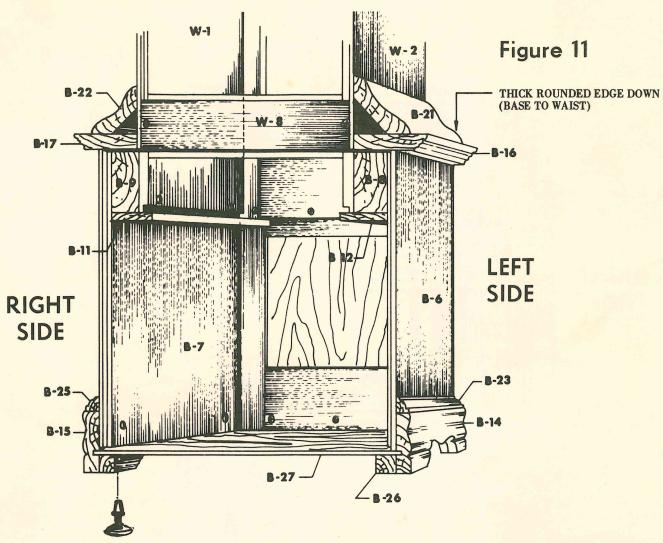
To Order Component Parts, Always Use Part Name And Stock Number For Walnut, Mahogany Or Cherry

				THICK-	WALNUT	UNIT	MAHOGANY		CHERRY	UNIT
	PART NAME	LENGTH	WIDTH	NESS	STOCK NO.		STOCK NO.		STOCK NO.	
H-1	HOOD, Right Side	19-1/2	10-3/4	3/4	3KW-H1	\$ 8.50	3KM-H1	\$ 7.25	3KC-H1	\$ 8.50
H-2	HOOD, Left Side	19-1/2	10-3/4	3/4	3KW-H2	8.50	3KM-H2	7.25	3KC-H2	8.50
H-3	HOOD DIAL FRAME	17	13-9/16	3/4	3KW-H3	7.50	3KM-H3	6.75	зкс-нз	7.50
H-4	HOOD, Left Side Trim	17	1-5/8	1/2	3KW-H4	1.50	3KM-H4	1.50	3KC-H4	1.50
H-5	HOOD, Right Side Trim	- 17	1-5/8	1/2	3KW-H5	1.50	3KM-H5	1.50	3KC-H5	1.50
H-6	HOOD FRONT CROSS PIECE	13-9/16 BS	2-1/4	3/4	3KW-H6	1.50	3KM-H6	1.50	3KC-H6	1.50
H-7	HOOD REAR CROSS BRACE	13-9/16 BS	2-3/4	3/4	3KW-H7	1.50	3KM-H7	1.50	3KC-H7	1.50
H-8	HOOD COLLAR, Front	15-3/32 SP	2-1/4	1	3KW-H8	2.50	3KM-H8	2.50	3KC-H8	2.50
H-9	HOOD COLLAR, Right Side	11 SP	2-1/4	1	3KW-H9	1.75	3KM-H9	1.75	3KC-H9	1.75
H-10	HOOD COLLAR, Left Side	11 SP	2-1/4	1	3KW-H10	1.75	3KM-H10	1.75	3KC-H10	1.75
H-11	CROWN FRONT ASSEMBLY	15-19/32 SF	7	1-7/8	3KW-H11	22.50	3KM-H11	20.00	3KC-H11	22.50
H-12	CROWN RETURN, Left Side	11-5/16 SP	3-5/16	1-7/8	3KW-H12	4.75	3KM-H12	4.50	3KC-H12	4.75
H-13	CROWN RETURN, Right Side	11-5/16 SP	3-5/16	1-7/8	3KW-H13	4.75	3KM-H13	4.50	3KC-H13	4.75
H-16	SPACER STRIP CROWN, Front	15-1/2	1-1/8	1/4	3KW-H16	.75	3KM-H16	.75	3KC-H16	.75
H-17	SPACER STRIP CROWN, Left Side	13-7/8	1-1/8	1/4	3KW-H17	.75	3KM-H17	.75	3KC-H17	.75
H-18	SPACER STRIP CROWN, Right Side	13-7/8	1-1/8	1/4	3KW-H18	.75	3KM-H18	.75	3KC-H18	.75
H-19	HOOD COLUMN, Left Side	17	1-1/4	1-1/4	3KW-H19	2.50	3KM-H19	2.50	3KC-H19	2.50
H-20	HOOD COLUMN, Right Side	17	1-1/4	1-1/4	3KW-H20	2.50	3KM-H20	2.50	3KC-H20	2.50
H-21	CROWN FINIAL	5-3/4	2-1/2	2-1/2	3KW-H21	3.00	3KM-H21	3.00	3KC-H21	3.00
H-22	HOOD PANEL INSERT	11-15/16	6-3/8	3/4	3KW-H22	3.00 ed	a. 3KM-H22	3.00 ea	. 3KC-H22	3.00 ea.
H-23	CROWN OVERLAY	3-13/16	1-5/8	1/2	3KW-H23	1.00	3KM-H23	1.00	3KC-H23	1.00
H-24	SOUND BOARD MOUNTING BLOCK	4-3/8	3/4	3/4	3KW-H24	1.00	3KM-H24	1.00	3KC-H24	1.00
H-25	SOUND BOARD MOUNTING BLOCK	4-3/8	3/4	3/4	3KW-H25	1.00	3KM-H25	1.00	3KC-H25	1.00
H-26	SOUND BOARD	13-9/16	4-9/16	1/2	3KW-H26	1.50	3KM-H26	1.25	3KC-H26	1.50
H-27	HOOD TRIM MOLDING, Left Side	9	9/16	9/16	3KW-H27	1.00	3KM-H27	1.00	3KC-H27	1.00
H-28	HOOD TRIM MOLDING, Right Side	9	9/16	9/16	3KW-H28	1.00	3KM-H28	1.00	3KC-H28	1.00
H-29	HOOD TOP PLYWOOD	14-3/16	9-3/8	1/4	3KW-H29	1.75	3KM-H29	1.75	3KC-H29	1.75
H-30	HOOD BACK PANEL PLYWOOD		14-9/16	1/4	3KW-H30	3.50	3KM-H30	3.35	3KC-H30	3.50
H-31	HOOD DOOR ASSEMBLY	16-7/8	14	3/4	3KW-H31	7.50	3KM-H31	6.75	3KC-H31	7.50
H-32	MOVEMENT MOUNT ASSEMBLY	8-3/4	13-1/8	3-1/8	3KW-H32	2.75	3KM-H32	2.75	3KC-H32	2.75
H-33	DIAL BOARD	13-1/16	8-3/16	1/2	3KW-H33	1.00	3KM-H33	1.00	3KC-H33	1.00



(Model 300)

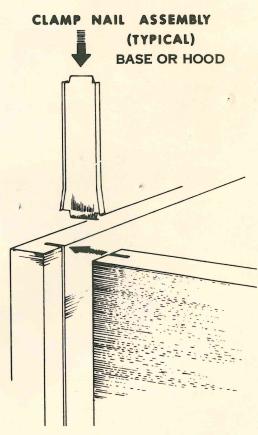
(Model 300)

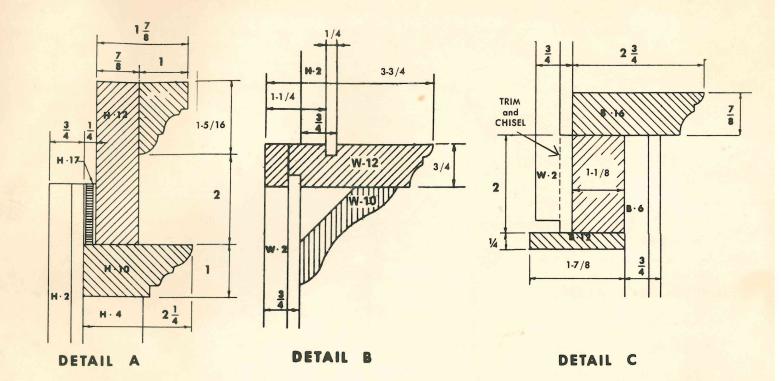


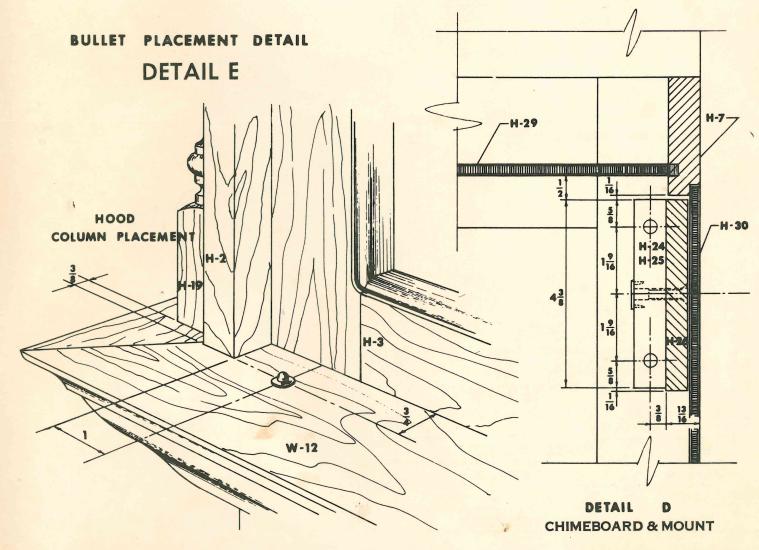
#### DEAR CUSTOMER:

We have precut the miters in our factory for your convenience. All of the front parts which are mitered have been cut 1/32 of an inch greater than the exact dimension. All front to back mitered pieces have been cut allowing approximately ½" excess material when measuring from the short point. The many variables of dimensions which occur during construction of your clock kit will, in many instances, require you to sand and trim the mitered corners to obtain a close, neat fit. The waist to hood and waist to base cove molding is a compound mitered piece. This molding, in all cases, requires trimming of the miter to obtain a close, neat fit. This trimming can be accomplished by trimming the inside edges of the back side of the molding in addition to the final fitting of the miter.

BASE CONSTRUCTION (REAR VIEW)

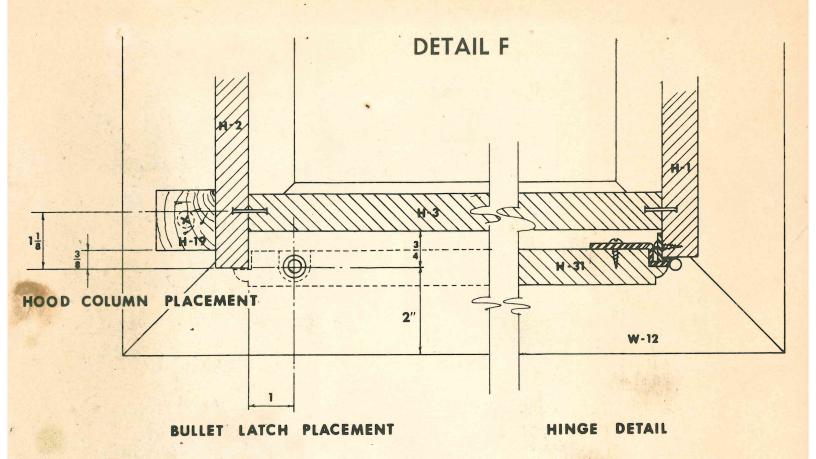


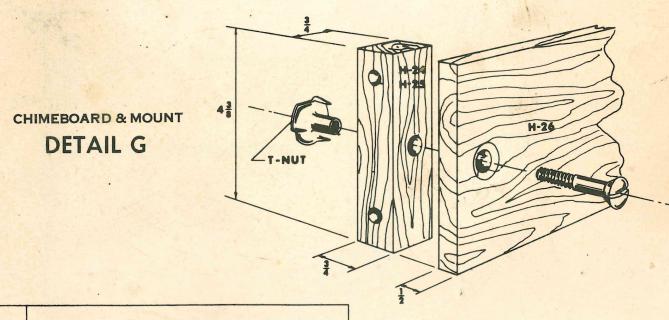


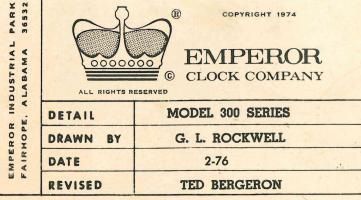


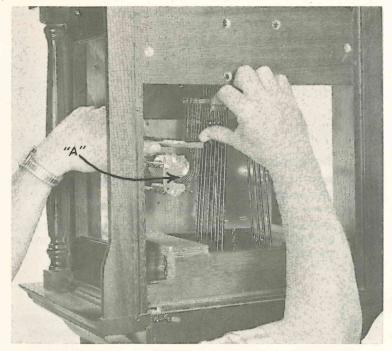
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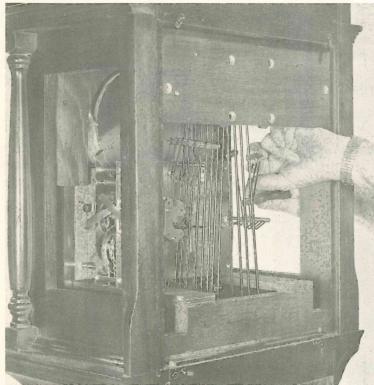
(Model 300)

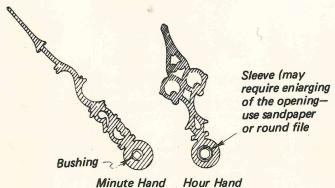












#### CHIME LEVERS MUST BE BENT BACK TO MEET THE CHIME RODS.

#### FIGURE 6A

Excerise care not to bend the bottom portion of the levers. Pliers are used to keep the bottom portion of each lever rigid to prevent twisting and possible damage at point "A".

Each of the chime hammers must be bent back to strike the chime rods on the center of the hammer.

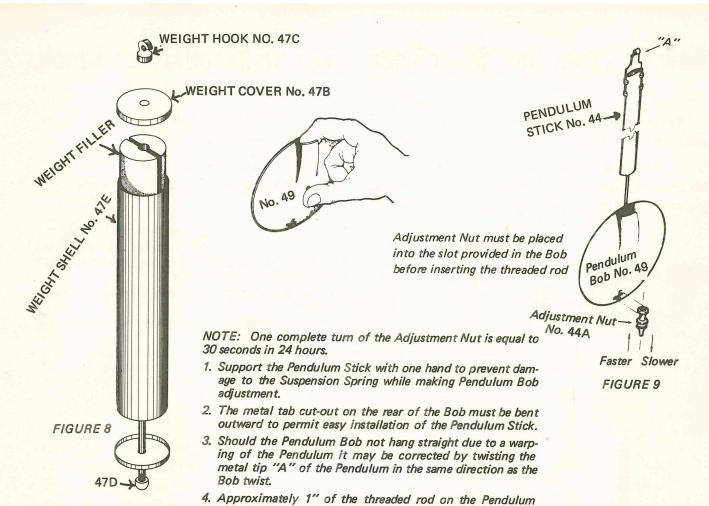
With your left hand hold each lever near the base with a pair of flat-jawed, snub-nosed pliers. Place the index finger of your right hand on top of the hammer and thumb above the nose of the pliers. Bend each lever back to meet its respective chime rod.



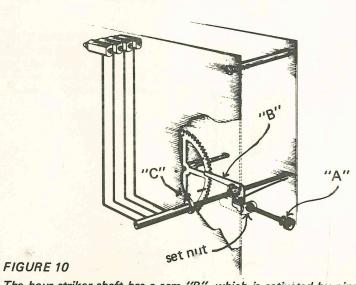
This shows the bending of the hour strike levers.

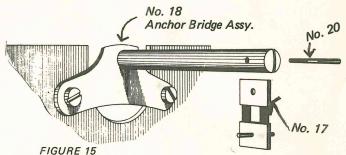
#### FIGURE 7

INSTALL THE HANDS: Place the chime selection lever to Westminster Chimes. (Fig. 14) When turning the minute hand clockwise always wait for chimes to play at each quarter. Turn the minute hand clockwise on the center shaft until the clock chimes 16 times, and strikes the hour. Repeat to the next 16 note chime and hour strike. Take the hour hand and close or open the gap in the sleeve—slightly (see Figure 7 drawing) and place it on the hour it struck. Take the minute hand, turn the bushing, if necessary, until it is lined up with the bushing on the center shaft then screw on the hand nut. Finger tight only. The minute hand must not touch the hour hand or the hour tube, both hands may require slight up-ward bend to clear the raised brass numerals on the dial. Remember to stop the pendulum when setting the minute hand.



Stick should extend through bottom of the Pendulum Nut.





#### DO NOT REMOVE ANCHOR BRIDGE TO REPLACE SUSP. SPRING

To replace the suspension spring, take a pair of needlenose pliers and pull the tapered pin out of the anchor bridge shaft. Then take the new suspension spring and line up the hole on it with the hole in the anchor bridge shaft. Insert the tapered pin in the right side of the anchor bridge shaft.

# The hour striker shaft has a cam "B", which is activated by pins or a star located on a wheel adjacent to the cam. The cam must not rest on the pins when the strike mechanism is at rest, but must be located between pins to activate cam "B", which must have a sufficient momentum built up to pre-

The position of cam "B" is adjusted by inserting, or retracting screw "A" after loosening its set nut. The positioning of screw "A" to far inward will narrow the draw back distance of the strike levers. The draw back distance should be one hammer length.

vent the weight of the hour shaft from stalling the movement before or

during the strike.

The hammer-rod distance should be corrected by loosening bushing "C" and turning the strike levers on the shaft.

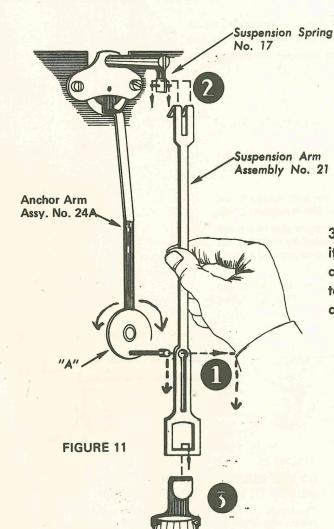
#### MAINTENANCE

Your Emperor Grandfather Clock Movement has been factory lubricated. Only the finest lubricants produced by modern technology have been used to provide lubrication and trouble free operation.

# **How To Level And Start Your Emperor Grandfather Clock**

MOVEMENT MODELS 200M or 300M

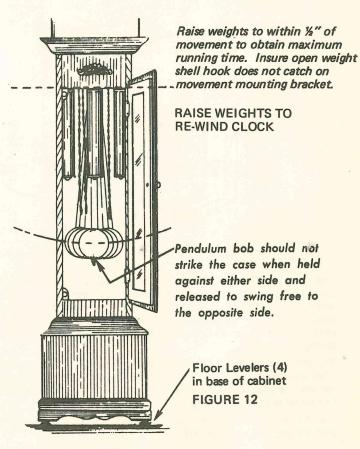
- 1. Remove the hood side panels. Release chime and strike silence levers and all factory packing, or chain ties. See Step 10B of operating instructions if more detail is needed.
- 2. Install the suspension arm (No. 21) and pendulum with the brass bob attached. Insure that the metal tab pressure against the pendulum stick does not prevent the bob from sliding up or down on the stick. See Step 12 of operating instructions if more detail is needed.



Attach the suspension arm assembly as illustrated

- a. Place the pin on the anchor assembly arm through the hole of the suspension arm. The pin should move down freely through the slot provided.
- Raise the suspension arm and place it on the suspension spring.
- Attach the pendulum as illustrated after installing the pendulum bob.
- d. The knurled nut "A" on the anchor arm assembly is movable and should be in the position as shown in Fig. 11. The pin should be in a line vertical to the anchor assembly arm.

3. Carefully place the clock where you would like to have it permanently situated. Care must be taken to prevent damage to the suspension spring which the pendulum is attached to. Level the clock, as illustrated, using the pendulum bob as the leveling device. DO NOT USE A CARPENTER'S LEVEL.



NOTE:

When your clock is level as directed, attach all of the weights. Start the pendulum swing. The clock should tick at one end of the pendulum swing, and tock at the opposite end of the swing. If the tick, or tock occurs in between the swing the clock will not run. You must adjust the anchor pallets as follows. If clock does not run... go to Fig. 13.

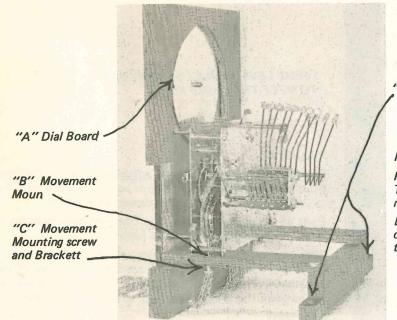


FIGURE 4C

Part "A" should be stained the same color as the clock case. The movement is held to the movement mount by the two movement mounting screws and brackets ("C").

Drill and then insert a two inch screw at each end of the rear of the movement mount at point "D", and screw down into the case.

Sound Board Mounting Block No. 25

#### FIGURE 5

Use the chime rods for your template and center the rods on the sound board. The case metal is flush with the bottom of the sound board. Drill the four holes needed using a ¼" or slightly larger drill. Countersink the holes for the four screws furnished. Install the chime rods on the sound board. The chime rods may require some slight bending to prevent them from touching each other when viberation occurs during chiming or striking.

Install the chime board with rods attached by first drilling and counter-sinking holes to fit the sound board mounting block already installed in the case. Install the sound board to make sure the top edge fits flush with the top rail.

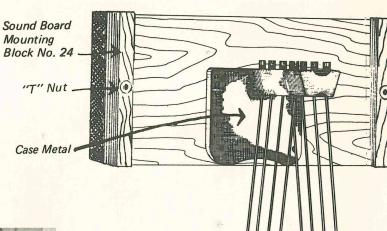




FIGURE 6

Each of the chime hammers must be bent forward to strike the chime rods on the center of the hammer.

The hammers should clear each rod approximately 1/8" for the best tone. If a lighter tone is desired bend the chime hammers away from the chime rod thereby increasing the distance between the hammer and the chime rods.