

**TITLE: ASKIT-01 ASSEMBLY INSTRUCTIONS**

INSTRUCTION SHEET: 3092

REVISION: 05

EFFECTIVE: 06-01-2020

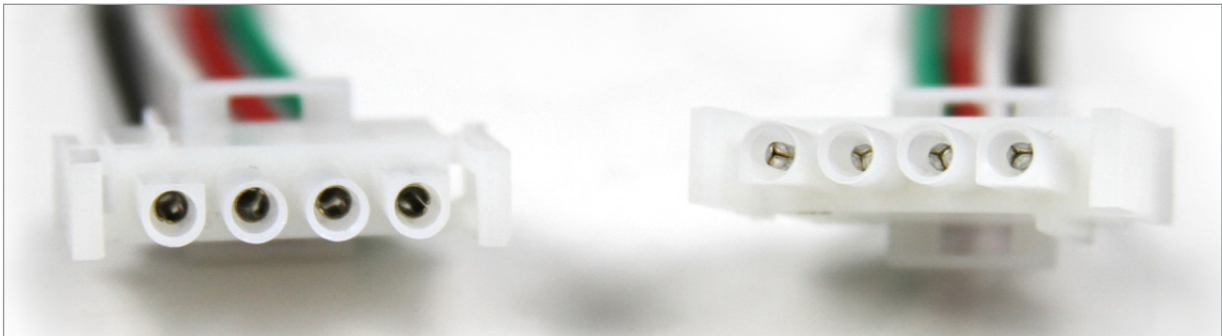
**Note:** It is assumed that the removal of the old movement/motors have been completed and the back plate is ready for assembling the new AllSync movement/dustcover assembly onto the back plate. When tearing down clock, retain all the bezel clips and all the fasteners for the dustcover and ground wire installation.

This Instruction Manual covers clocks with the following backplates: Lathem, National and the American Time clocks.

## New Installation Note

### Warning:

While both ends of the wire harness look the same, they are not. The male pin connector is for the clock side. The female pin connector is for the wall side and can be cut off if there is no mating connector available.



Female pin connection to wall.  
Cut this end if necessary.

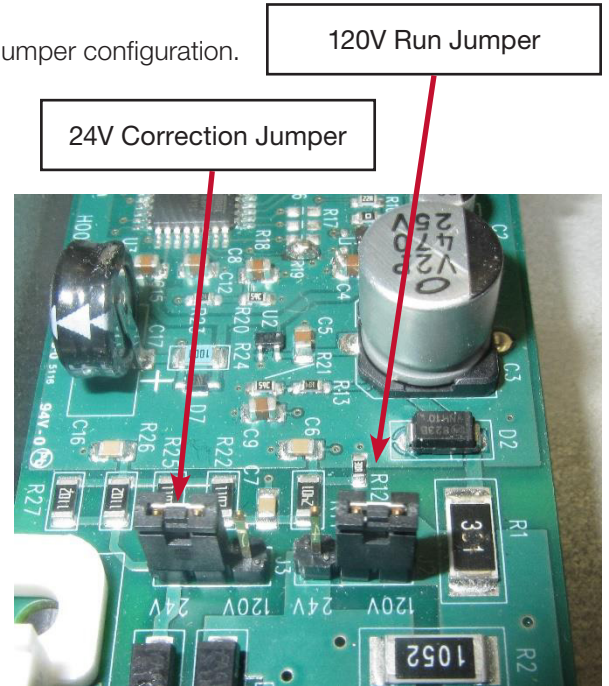
Male pin connection to clock.  
**DO NOT CUT.**

If repairing a 120V clock with a 24V correction or a 24V clock with a 24V correction, please see section below. Otherwise skip to the clock repair section.

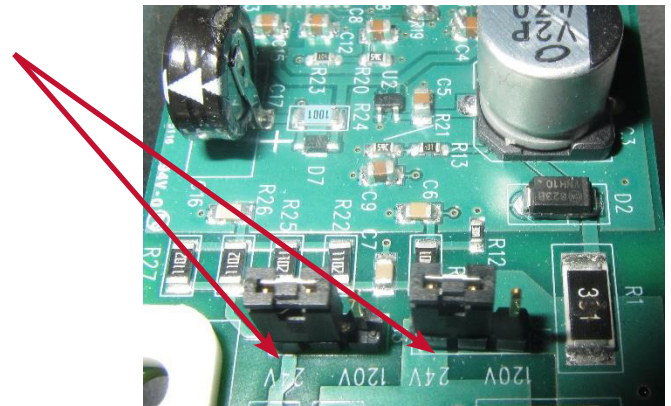
**CAUTION:** It is strongly recommended that ESD grounding attire be utilized. There is potential for electrical static discharge (ESD), which may damage components.

### 120V/24V CORRECTION OR 24V/24V CLOCKS

1. If assembling a 120V run/24V correction clock, see photo on right for jumper configuration.

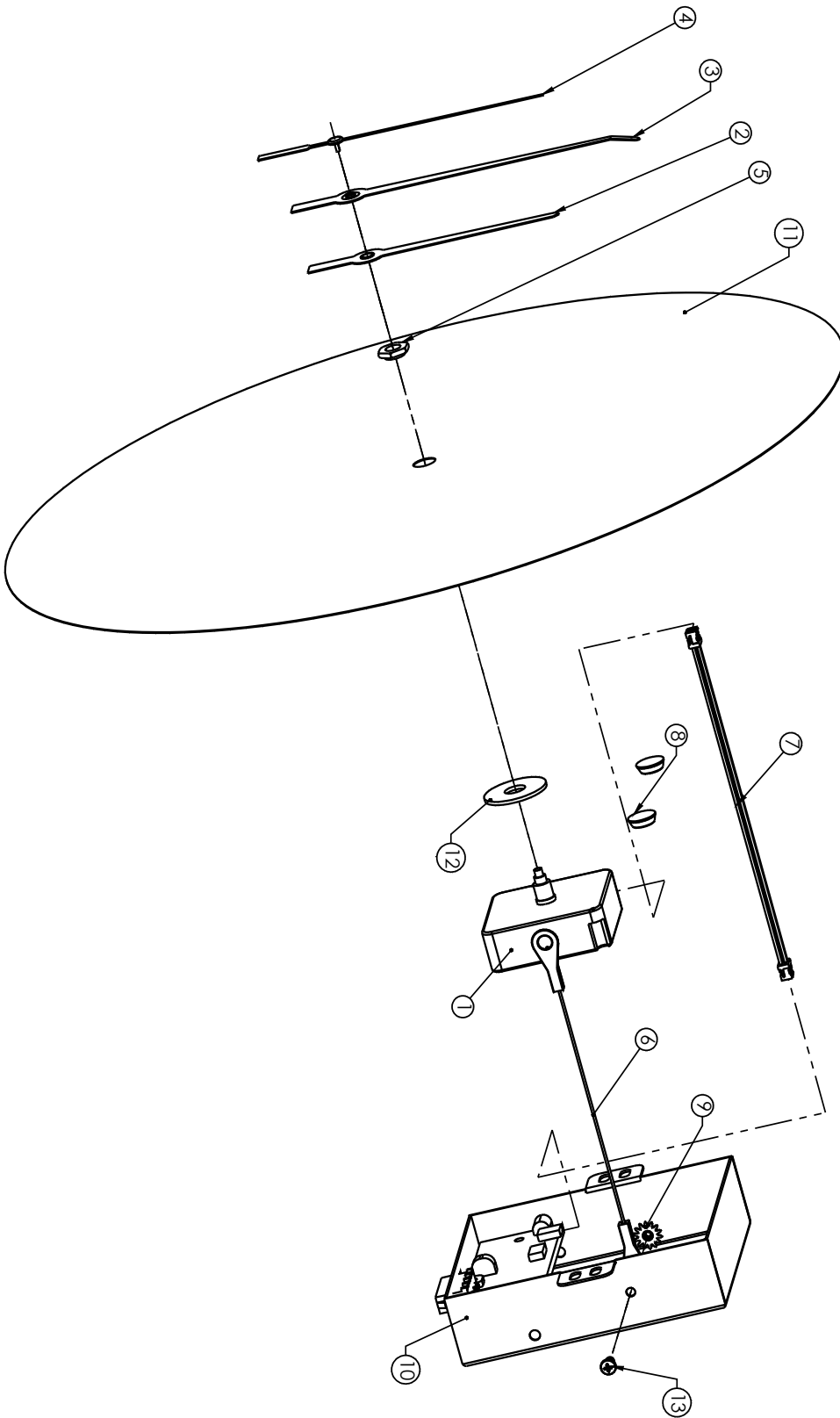


2. If assembling a 24V run/24V correction, move both jumpers to the 24V pins.



# ASKIT-01

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	H004640	MOVEMENT	1	8	H002615	Rubber Bumpers(SJ-5012) 3M Bumpoon Block	2
2	H004585	Hand, Hr, 12" Style H	1	9	18965	NS NUT KEPS # 6-32 STEEL ZINC	1
3	H004586	Hand, Min, 12" Style H	1	10	AllSync Dust Cover Assy.	Dust Cover Assembly	1
4	5119-S	Hand, Sweep, Red	1	11	Dial	DIAL/BACK PLATE	1
5	PR102190	NUT	1	12	H004152	WASHER, RUBBER	1
6	H002659	EXTENSION 6" GROUND	1	13	A1167	PHILLIPS PAN/HD 6-32 X 5/16	1
7	H003729	WIRING HARNESS, MVNT TO TRANSLATOR,8",ALLSYNC PLUS	1				



# LATHEM CLOCK REPAIR

## MOVEMENT INSTALLATION

1. Put a rubber washer on the movement (**H004640**).
2. Insert through the center hole from the back of the bezel.
3. Install center nut (**PR102190**).
4. Install anti-rotation bump-ons (**H002615**) to each side of the movement.



## HAND INSTALLATION

1. Align the hour hand with the 12:00 position and push down onto the shaft all the way down to the hour shoulder.
  - 1.1 If the hour hand needs to be adjusted, it must be pulled off the shaft and re-aligned.

2. Apply the minute hand to the clock at the 12:00 position and push down onto the shaft and push the hand all the way down to the minute shoulder.

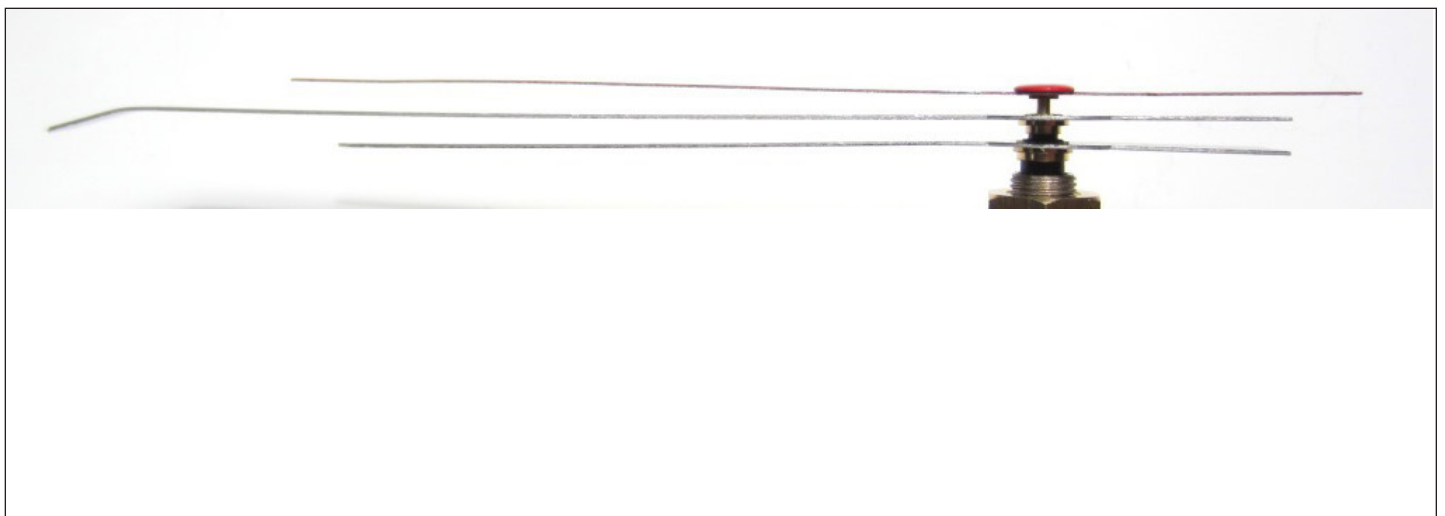
**Note:** Tip of minute hand is factory-bent to accommodate the crystal

3. Apply the sweep by aligning it to the 12:00 position, place spacer directly under the sweep so that it is in between the minute hand and the sweep hand.

4. Push down on the sweep hand until the sweep contacts the spacer.

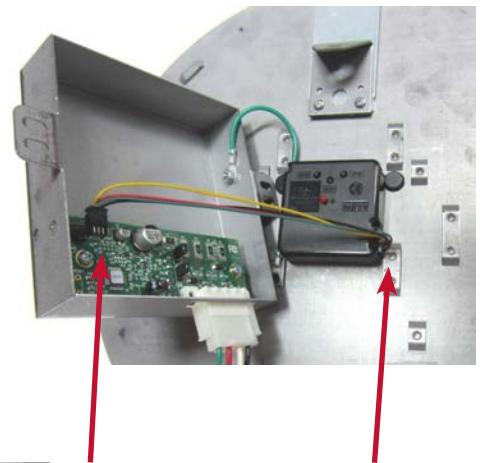
5. Remove the spacer.

6. Ensure the spacing between the hands is as even as possible as shown in the picture.



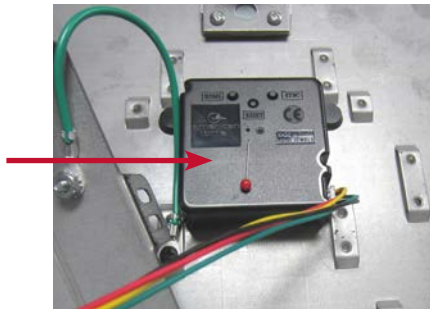
## GROUND WIRE AND CABLE HARNESS

1. Add ground wire (**H002659**) to the inside of the dustcover with a screw (**A1167**) and nut (**18965**). Screw goes in from the outside and nut is fastened on the inside of the dustcover.
2. Fasten the free end of the ground wire to the bezel on the clock with a screw from the clock teardown.
3. Take one end of the cable harness and insert into the movement with the yellow and green wires facing up. Take the other end and insert into the board with the yellow and green wires facing away from the dustcover. Note: the cable plug is keyed and will only insert if properly oriented -- do not force the plug into the board terminal.



## DUSTCOVER INSTALLATION

1. Remove the pin from the movement.



2. With the back of the dustcover facing upwards, place dustcover/bracket assembly down onto the backplate and fasten to the backplate with the screws removed in the clock teardown.

**IMPORTANT!**  
Synchronization of this clock is performed by your Master Clock. Simply wire in at location, and within 12 hours the clock should be synchronized with the Master Clock.

**NOTE:**  
No Manual Adjustments may be performed on this clock. If hands are manually moved, clock will not synchronize to the master. There are no user serviceable parts on this clock.

For assistance call  
**800-328-8996**

**american time.**  
Integrated Solutions

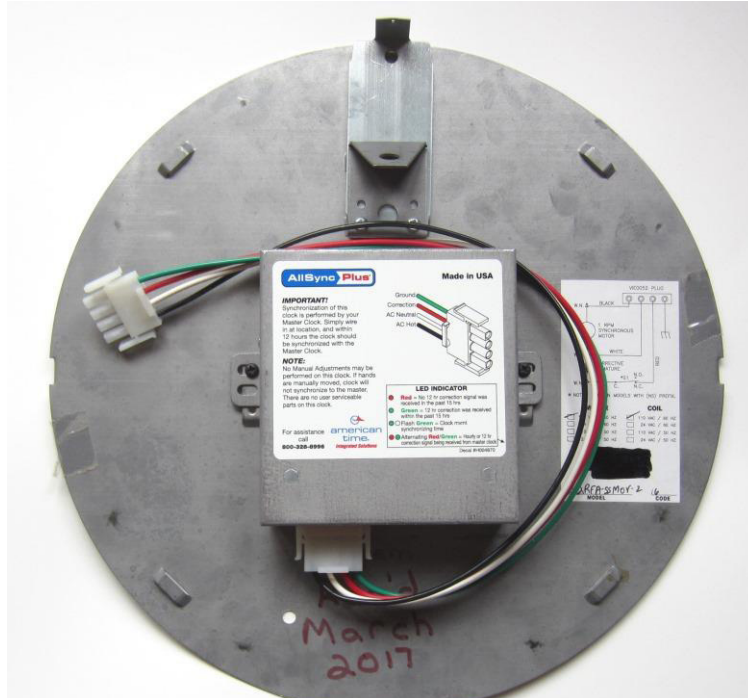
Ground  
Correction  
AC Neutral  
AC Hot

**LED INDICATOR**

- **Red** = No 12 hr correction signal was received in the past 15 hrs
- **Green** = 12 hr correction was received within the past 15 hrs
- **Flash Green** = Clock mymt synchronizing time
- **Alternating Red/Green** = Hourly or 12 hr correction signal being received from master clock

3. Clock is ready to be reinstalled into the bezel/crystal assembly.

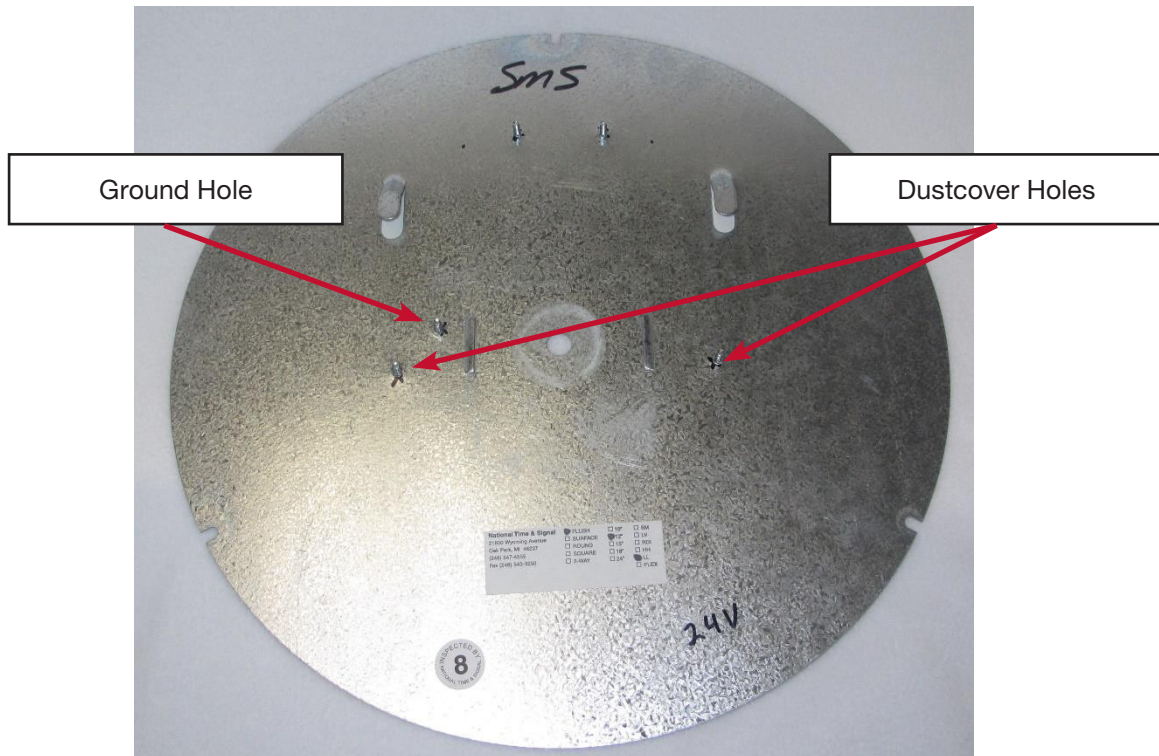
**IMPORTANT:** After installing into the bezel/crystal assembly, check to make sure that the hands are not touching each other, the crystal, or the dial, as this will cause the hands to stop or lose time.



# NATIONAL CLOCK REPAIR

## BACK PLATE PREPARATION

1. Drill holes for the ground and dustcover using a drill bit appropriate for the size of the fastener being used. Fasteners for securing the ground wire and dustcover to the back plate are not included in the kit.



## MOVEMENT INSTALLATION

1. Put a rubber washer on the movement (**H004640**).
2. Insert through the center hole from the back of the bezel.
3. Install center nut (**PR102190**).
4. Install anti-rotation bump-ons (**H002615**) to each side of the movement.



## HAND INSTALLATION

1. Align the hour hand with the 12:00 position and push down onto the shaft all the way down to the hour shoulder.
  - 1.1 If the hour hand needs to be adjusted, it must be pulled off the shaft and re-aligned.
2. Apply the minute hand to the clock at the 12:00 position and push down onto the shaft and push the hand all the way down to the minute shoulder.

**Note:** Tip of minute hand is factory-bent to accommodate the crystal
3. Apply the sweep by aligning it to the 12:00 position, place spacer directly under the sweep so that it is in between the minute hand and the sweep hand.
4. Push down on the sweep hand until the sweep contacts the spacer.
5. Remove the spacer.
6. Ensure the spacing between the hands is as even as possible as shown in the picture.



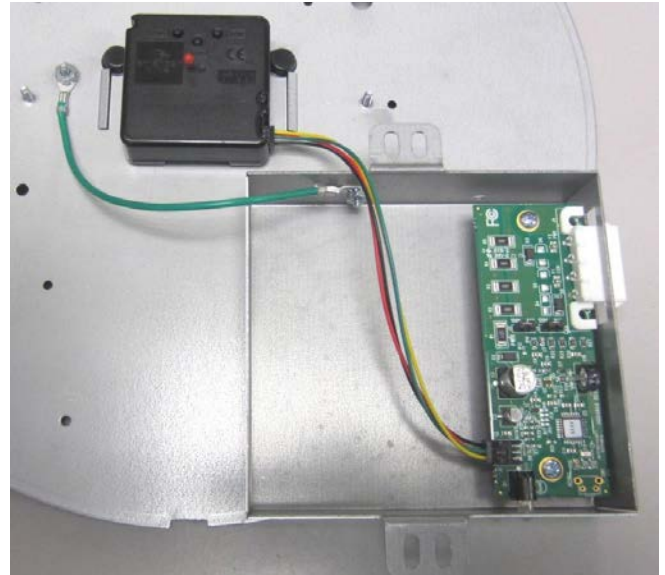
## GROUND WIRE AND CABLE HARNESS

1. Add ground wire (**H002659**) to the inside of the dustcover with a screw (**A1167**) and nut (**18965**). Screw goes in from the outside and nut is fastened on the inside of the dustcover.
2. Fasten the free end of the ground wire to the bezel on the clock.





- Take one end of the cable harness and insert into the movement with the yellow and green wires facing up. Take the other end and insert into the board with the yellow and green wires facing away from the dustcover. Note: the cable plug is keyed and will only insert if properly oriented -- do not force the plug into the board terminal.



## DUSTCOVER INSTALLATION

- Remove the pin from the movement.



- With the back of the dustcover facing upwards, place dustcover/bracket assembly down onto the backplate and fasten to the backplate.



- Clock is ready to be reinstalled into the bezel/crystal assembly.

**IMPORTANT:** After installing into the bezel/crystal assembly, check to make sure that the hands are not touching each other, the crystal, or the dial, as this will cause the hands to stop or lose time.



## ATS CLOCK REPAIR MOVEMENT INSTALLATION

- Put a rubber washer on the movement (**H004640**).
- Insert through the center hole from the back of the bezel.
- Install center nut (**PR102190**).
- Install anti-rotation bump-ons (**H002615**) to each side of the movement.



## HAND INSTALLATION

- Align the hour hand with the 12:00 position and push down onto the shaft all the way down to the hour shoulder.
  - If the hour hand needs to be adjusted, it must be pulled off the shaft and re-aligned.
- Apply the minute hand to the clock at the 12:00 position and push down onto the shaft and push the hand all the way down to the minute shoulder.
 

**Note:** Tip of minute hand is factory-bent to accommodate the crystal
- Apply the sweep by aligning it to the 12:00 position, place spacer directly under the sweep so that it is in between the minute hand and the sweep hand.

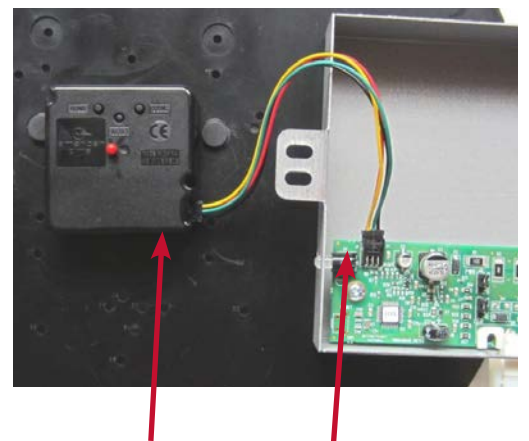
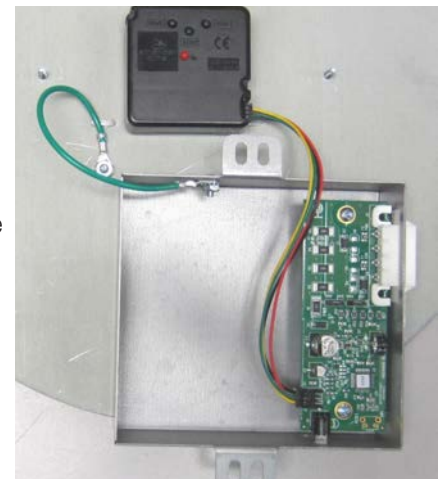


4. Push down on the sweep hand until the sweep contacts the spacer.
5. Remove the spacer.
6. Ensure the spacing between the hands is as even as possible as shown in the picture.



## GROUND WIRE AND CABLE HARNESS

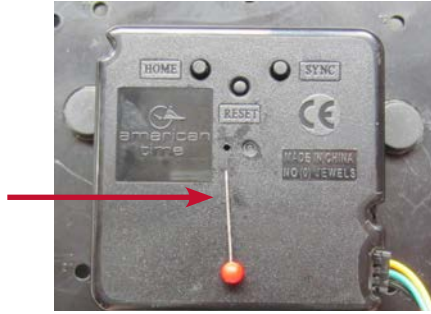
1. If the clock has a metal back plate or metal bezel, add ground wire (**H002659**) to the inside of the dustcover if the ground connection is inside of the dustcover area or to the outside of the dustcover if the ground connection is outside of the dustcover area with a screw (**A1167**) and nut (**18965**). Screw goes in from the outside of the dustcover and nut is fastened on the inside of the dustcover.
2. Fasten the free end of the ground wire to the back plate or bezel on the clock with a screw and nut from the clock teardown.
3. Take one end of the cable harness and insert into the movement with the yellow and green wires facing up. Take the other end and insert into the board with the yellow and green wires facing away from the dustcover. Note: the cable plug is keyed and will only insert if properly oriented -- do not force the plug into the board terminal.



**Note:** Plastic clocks will not use a ground screw/wire

## DUSTCOVER INSTALLATION

1. Remove the pin from the movement.



2. With the back of the dustcover facing upwards, place dustcover/bracket assembly down onto the backplate and fasten to the backplate.



3. Clock is ready to be reinstalled into the bezel/crystal assembly.

**IMPORTANT:** After installing into the bezel/crystal assembly, check to make sure that the hands are not touching each other, the crystal, or the dial, as this will cause the hands to stop or lose time.

