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**E6360.00 HOT PLATE SHAKER UNIT**

Variable Speed - Reciprocating

20-240 oscillations/minute 115 V, 50/60 HZ

## USE AND CARE FOR CATALOG NUMBER:

- E6360.00 HOT PLATE SHAKER POWER UNIT  
Variable Speed – Reciprocating with Timer and Tachometer  
20-240 osc/min, 115 V, 50/60 HZ

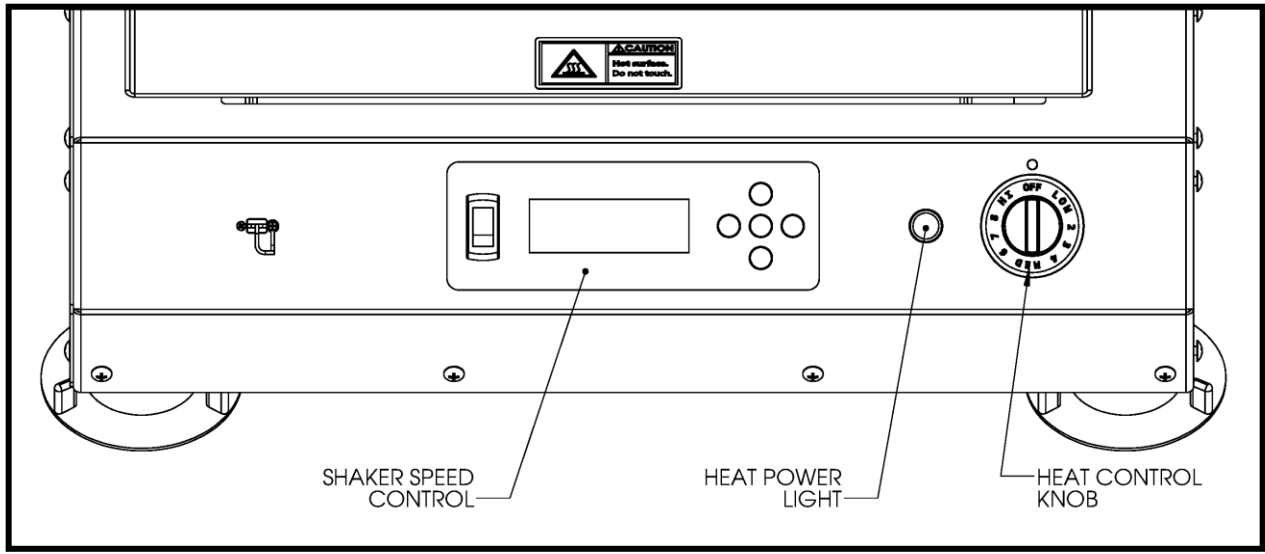
## GENERAL INFORMATION

- Handle this unit with care. Unpack and check that the contents coincide with the packing-list. If any part is damaged or missing, please advise the distributor immediately.
- Do not install or use this equipment without first reading this manual.
- This manual should always be attached to the equipment and made available to all users.
- If you have any doubts or inquiries, please contact your supplier or **Eberbach Corporation** technical service.

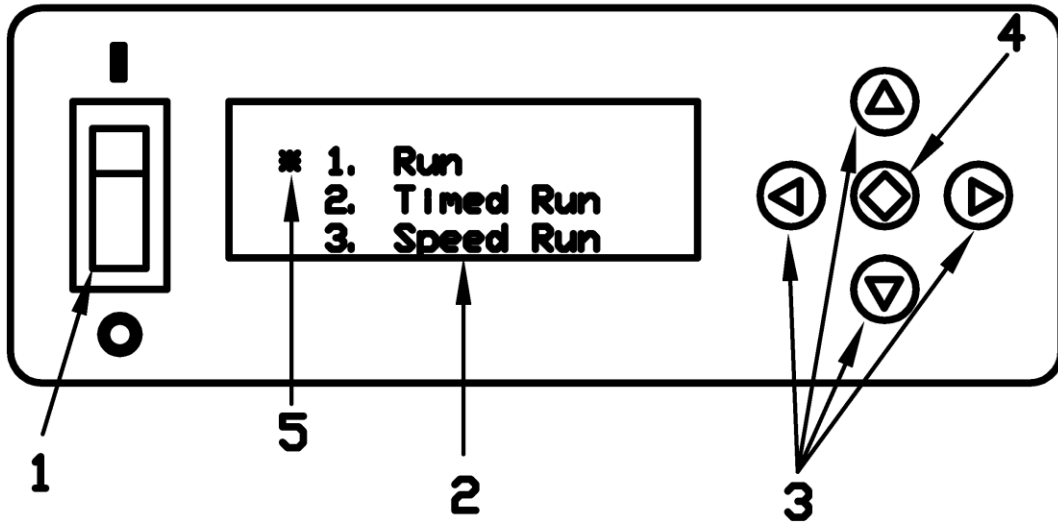
## OPERATION

The **Eberbach** benchtop reciprocating hot plate shaker (E6360.00) features:

- A continuously variable speed range, adjustable between 20 and 240 osc/min with stock stroke length set to 1.0”.
- A digital tachometer and digital timer capable of being programmed for timed heating and shaking procedures.
- Aluminum 10”x16” hot plate surface controlled with a continuously variable “Infinite” Switch. Hot plate uses approximately 350 W on LOW setting, 700 W at MED and 1400 W at HIGH setting. [Approximate temps are 194° F, 356° F and 700° F respectively (90°C, 180 °C and 371°C)]. Turn the Hot Plate on by rotating the Oven Switch. The Amber Pilot Light will turn on to show when Hot Plate is on.
- A maximum shaking weight of 20 lbs additional at low speed (20lb hotplate + 20lb additional = 40lb total) and linearly to 5 lbs additional at high speed (with stock 1.0” stroke setting).  
Contact **Eberbach** for other stroke setting weight limits.



### FRONT PANEL DISPLAY



- 1) Power Switch
- 2) Liquid Crystal Display (LCD)
- 3) Directional Pad (D-Pad)
- 4) Enter Button
- 5) Cursor

**Operation:** Press the **Power Switch** down into the ON position. The LCD should light up and show the main menu. There are three different run modes to choose from. Select a run mode by moving the **Cursor** (using the **D-PAD**) and press the **Enter Button**.

**NOTE:** The **Power Switch** is only for **Motor Control**. It will not turn off the **Hot Plate!!!** Rotate the **Oven Switch** to the “**Off**” position and ensure that the **Pilot Light** is off when shutting down the **Hot Plate**.

**Run Mode:** The shaker will begin the run mode at its lowest speed. The speed shown in parenthesis (xxxx) is the set speed controlled by the user. The speed listed to the right is the tachometer read out or the actual speed of the shaker in real time. The speed can be increased/decreased by pressing and holding the up/down arrows on the **D-PAD**. The longer the button is held down the faster the speed will increase/decrease. Once engaged the timer will begin counting all the way up to 999 hours before the timer overflows back to zero. To pause the shaker move the **Cursor** to the **PAUSE** item by pressing the left arrow on the **D-PAD** and press the **Enter Button**. The clock will pause at its current time and the shaker will gradually come to a complete stop. The clock and shaker can be resumed at its current time and speed by selecting **RESUME** and pressing the **Enter Button**. To go back to the main menu move the **Cursor** to the **EXIT** item by pressing the right arrow on the **D-PAD** and then press the **Enter Button**.

RUN TIME	00: 00: 00
RPM	( 100) 100
* PAUSE	EXIT

RUN MENU

**Timed Run Mode:** The timed run mode features a count down timer that automatically shuts the shaker off when the time runs out. When selected the user will be taken to the Timed Run Setup Menu and will need to input the run time in hours, minutes, seconds and select the speed for the run. The left/right arrows on the **D-PAD** can be used to move the cursor between hours, minutes or seconds and the up and down arrows can be used to set the time. The longest run time allowed is 999:59:59. Once the time is set move the **Cursor** down by pressing the right arrow on the **D-PAD** until the **Cursor** is next to the RPM line item. The speed can be set using the up and down arrows on the **D-PAD**. Now that the data is set navigate the **Cursor** to the START line item using the left/right arrows on the **D-PAD** and press the **Enter Button**.

```
TIMED RUN SETUP
RUN TIME HR: MN: SC
* RPM          100
START          EXIT
```

TIMED RUN SETUP MENU

After selecting START the shaker will begin at the selected speed and the timer will begin counting down. The speed can be adjusted in real time using the up/down arrows on the **D-PAD**. The speed shown in parenthesis is the target speed controlled by the user and the speed listed to the right is the actual speed as read by the tachometer. The shaker and countdown timer can be paused and resumed. Move the **Cursor** to the line item PAUSE by pressing the left arrow on the **D-PAD** and then press the **Enter Button**. Exiting the Timed Run Menu will bring the user back to the Timed Run Setup Menu.

```

RUN TIME  999: 59: 59
RPM      (< 100)    100
* PAUSE                                EXIT

```

TIMED RUN MENU

**Speed Run Mode:** The speed run allows the user to program in a set run speed. Once engaged the timer will begin counting all the way up to 999 hours before the timer overflows back to zero. Select the speed run mode from the main menu and press the **Enter Button**. The user will be prompted with the speed run setup menu. Set the desired speed using the up/down arrows on the **D-PAD**. The left/right arrows can be used to move the **Cursor** between START and EXIT. EXIT will take the user back to the main menu. Keep the **Cursor** next to the START line item and press the **Enter Button**.

```

SPEED RUN SETUP
RPM                               100
* START                           EXIT
SPEED RUN SETUP MENU
```

The user will now be taken to the speed run menu. The shaker will begin at the speed selected in the setup menu. The speed run menu behaves in the same way as the run menu with one exception. Pressing EXIT will not take the user back to the main menu instead pressing EXIT will take the user back to the speed run setup menu.

```

RUN TIME 00: 00: 00
RPM      ( 100)    100
*PAUSE                               EXIT
SPEED RUN MENU
```

**Note:** All run menus will have two speeds listed. The leftmost speed will be displayed inside parenthesis. This is the target speed controlled by the user. The shaker will attempt to match this speed and should do so within ten seconds after making an adjustment. The rightmost speed is the tachometer reading, which shows the user what the shaker is actually running at. The tachometer reading will not necessarily match the target speed at all times, but is guaranteed to be within +/- 5% RPM.

**Note:** Reciprocating shakers will display OSC (oscillations) instead of RPM (revolutions per minute).

**Note:** Use slowest speed necessary to produce required shaking action.

*If you have any doubts or inquiries concerning operation contact your supplier or Eberbach Corporation technical service.*

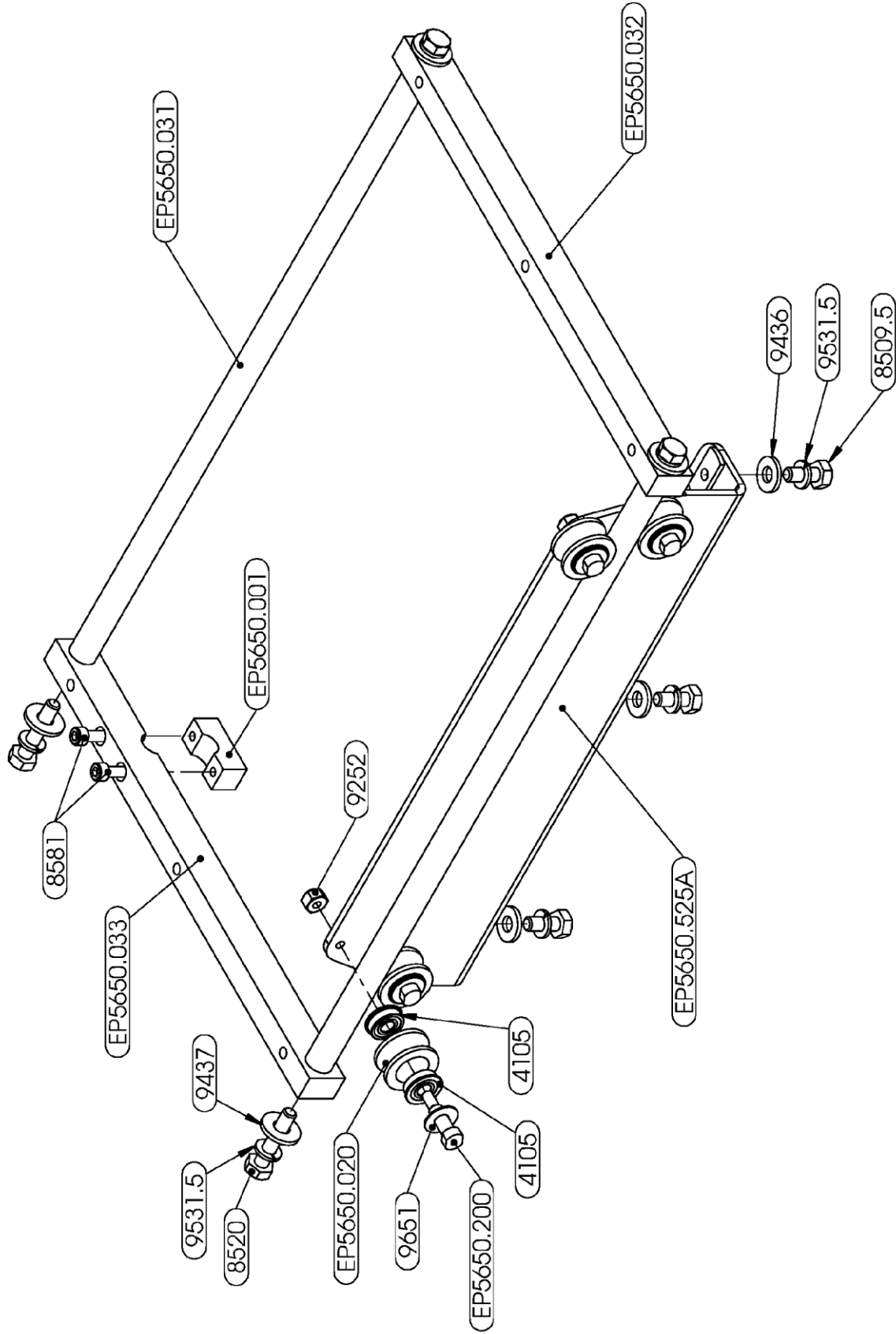


PartNo	DESCRIPTION	QTY.
4104	BEARING, 1615-2RS	5
4105	BEARING, FLANGED	16
4266	2L150R BELT	2
4519	PULLEY	2
5320	7/16 RETAINING CLIP ZINC PLATED	2
5528	3.75" SUCTION CUP W/ 5/16-18 THREADED POST	4
6010.7	30W POWER SUPPLY	1
6063.1	CABLE TIE MOUNT, HOLE DIA (.025 - .125")	12
6063.2	CABLE TIE	12
6102	OVERLAY	1
6110	FUSE, 0.5AMP TIME DELAY	1
6122	CIRCUIT BREAKER 15A, 115VAC	1
6131.1	FUSE HOLDER	2
6132	FUSE, 3AMP TIME DELAY	1
6200.5	S/S 90 DEGREE CONDUIT CLAMP	1
6200.7	S/S CONDUIT	1
6217	CONNECTOR, QUICK DISCONNECTED	1
6267.2	18AWG FERRULE CONNECTOR	1
6272	AC POWER INLET	1
6332	BODINE DC MOTOR CONTROLLER MODEL #780	1
6452	LENS CAP, RED	1
6460.2	PILOT LIGHT, AMBER, DOMED	1
6507.1	ROCKER SWITCH	1
6522.5	ROTARY SWITCH CONTROL	1
6649	115V POWER CORD, TYPE B PLUG	1
6730	7 TERMINAL GROUNDING BLOCK	1
6851	DISPLAY BOARD	1
6855	USB BOARD	1
6924	DC MOTOR 1/17HP	1
7397	#2-56 X 1/4" S/S PAN HD. MACHINE SCREW	1
7398	#2-56 X 5/16" S/S PAN HD. MACHINE SCREW	1
7568.8	#4-40 X 11/16" S/S PAN HD. MACHINE SCREW	2
7617	#6-32 X 1/2" S/S ROUND HD. MACHINE SCREW	2
8001	#4-40 X 9/32" NYLON BINDING HD. SCREW	4
8050	#4-40 x 3/8" S/S PAN HD. MACHINE SCREW	4
8285	#8-32 X 1/4" S/S TRUST HD. SCREW	29
8321.5	#10-32 X 1/4" SET SCREW	2
8325	1/4"-20 X 1/4" SET SCREW	4
8509.5	1/4"-20 X 5/8" S/S HEX HEAD SCREW	8
8512	1/4"-20 X 3/4" HEX HEAD SCREW	8
8520	1/4"-20 X 1-1/4" HEX HEAD SCREW	4
8520.5	1/4"-20 X 1-1/4" S/S HEX HEAD SCREW	4
8581	#10-32 X 1-1/4" SOCKET HD. SCREW	5
8582	#8-32 X 3/8" SOCKET HD. SCREW	4
8584.9	#10-32 X 3/4" S/S SOCKET HD. STEEL SCREW	1

8585.4	#10-32 X 1" SOCKET HD. STEEL SCREW	4
8586	1/4"-20 X 1/2" SOCKET HD. SCREW	6
9206	#6-32 NYLON LOCK NUT	2
9252	#10-32 NYLON-INSERT LOCKNUT	8
9436	1/4" S/S SAE WASHER	20
9437	1/4" OVERSIZE WASHER	4
9473	#8 S/S MIL-SPEC WASHER	4
9519.5	#8 S/S SPLIT LOCK WASHER	4
9521.5	#10 S/S SPLIT LOCK WASHER	2
9531.5	1/4" 316 S/S SPLIT LOCK WASHER	24
9651	PHENOLIC WASHER	8
9721	GASKET	1
9800	ROUND SPACER, NYLON	2
EP5650.001	CLAMP	2
EP5650.002	CRANK OSCILLATING SHAFT	1
EP5650.003	PULLEY INTERMEDIATE 1" P.D. X 2L	1
EP5650.004	PULLEY INTERMEDIATE 1" P.D. X 2L	1
EP5650.005	FLEXIBLE PIVOT	1
EP5650.006	SHAFT INTERMEDIATE DRIVE	1
EP5650.007	SHAFT OUTPUT DRIVE	1
EP5650.015	CRANK BODY	1
EP5650.020	ROLLER BEARING	8
EP5650.031	GUIDE RAIL	2
EP5650.032	LOWER PLATFORM CONNECTOR	1
EP5650.033	LOWER PLATFORM CONNECTOR, DRIVE	1
EP5650.200	SHOULDER SCREW	8
EP5650.502A	TACH ASSEMBLY	1
EP5650.525A	RUNNER SUPPORT BEAM ASSEMBLY	2
EP5650.SS.501A	MOTOR MOUNT ASSEMBLY	1
EP5850.076	COLLAR	4
EP5850.408	BEARING MOUNT	4
EP5850.409	CONNECTING ROD	1
EP6360.540A	HOT PLATE ASSEMBLY	1
6175	STRIP HEATERS 350 WATTS 120 VOLTS WATLOW	4
6200.5	S/S 90 DEGREE CONDUIT CLAMP	1
6805	STICKER, CAUTION HOT SURFACE	1
8277.4	#10-32 X 3/8" S/S TRUST HD. SCREW	14
8530.2	5/16-24 X 3/4" 316 S/S HEX HEAD SCREW	4
8581.7	#8-32 X 3/8" SS SOCKET HD. SCREW	8
9235	#8-32 S/S MACHINE SCREW NUT	8
9254	#10-32 S/S MACHINE SCREW NUT	1
9441.1	5/16" 316 S/S WASHER	4
9521.5	#10 S/S SPLIT LOCK WASHER	1
9525.1	5/16" 316 S/S SPLIT LOCK WASHER	4
E6360.A.BC.CW	CROSSWISE CLAMP BAR	2
EP6360.001	HOT PLATE	1

EP6360.002	HOT PLATE INSULATION COVER	1
EP6360.003	HEATING ELEMENT BRACE	1
EP6360.005	INSULATION	1
EP6360.008	CARRIER RAILS	2
EP6360.027	HOT PLATE CARRIER	1
EP6360.S.004	CARRIER SUPPORT	4
EP6360.651A	WIRE HARNESS	1
EP6360.SS.202	SIDE PANEL	2
EP6360.SS.505A	TOP FRONT PANEL ASSEMBLY	1
EP6360.SS.506A	REAR PANEL ASSEMBLY	1
EP6360.SS.520A	BASE ASSEMBLY	1
EP6360.SS.530A	TOP COVER ASSEMBLY	1

Contact your supplier or **Eberbach Corporation** technical support with any inquiries concerning replacement parts and installation.



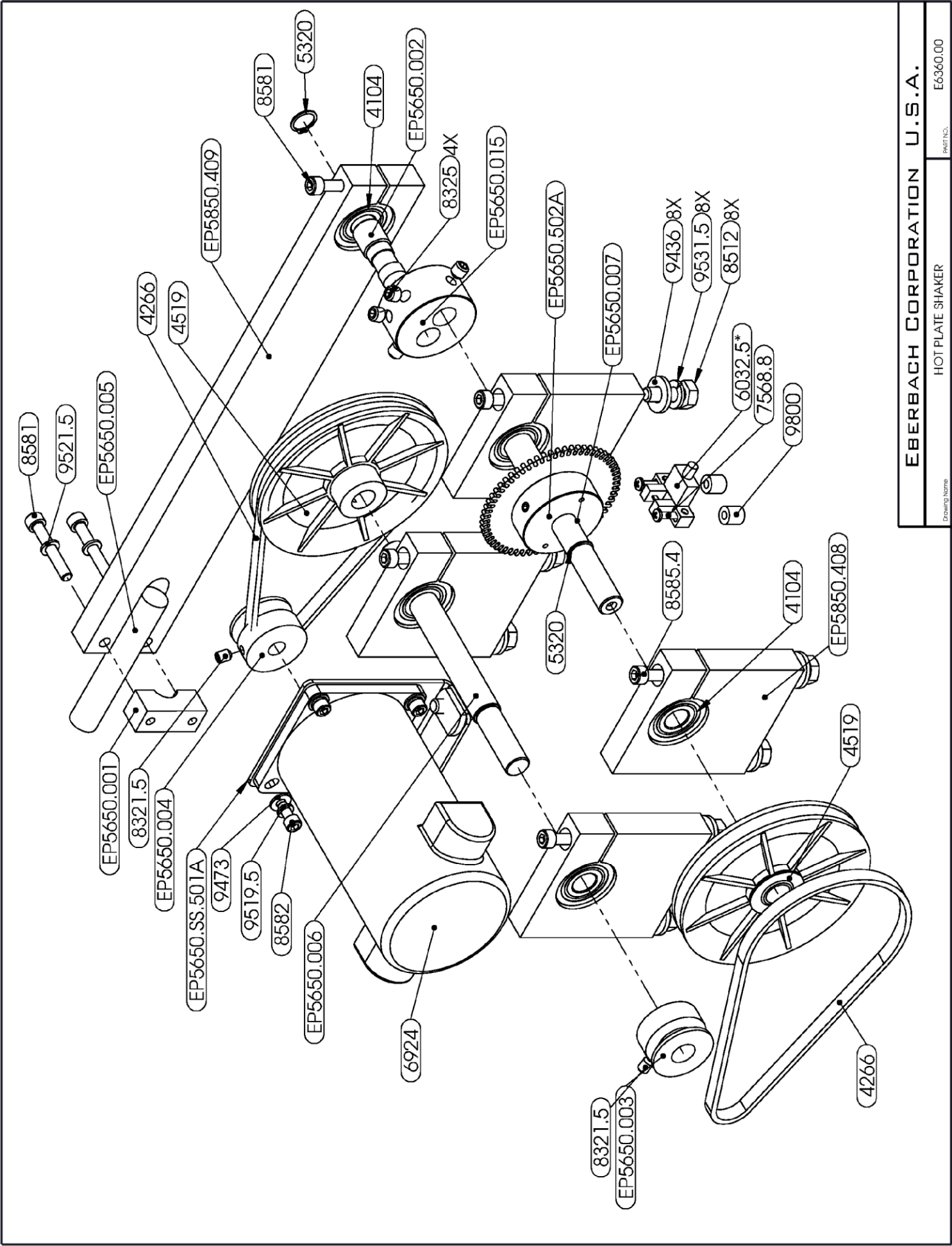
**EBERBACH CORPORATION U.S.A.**

HOT PLATE SHAKER

E6360.00

Drawing Name

PART NO.



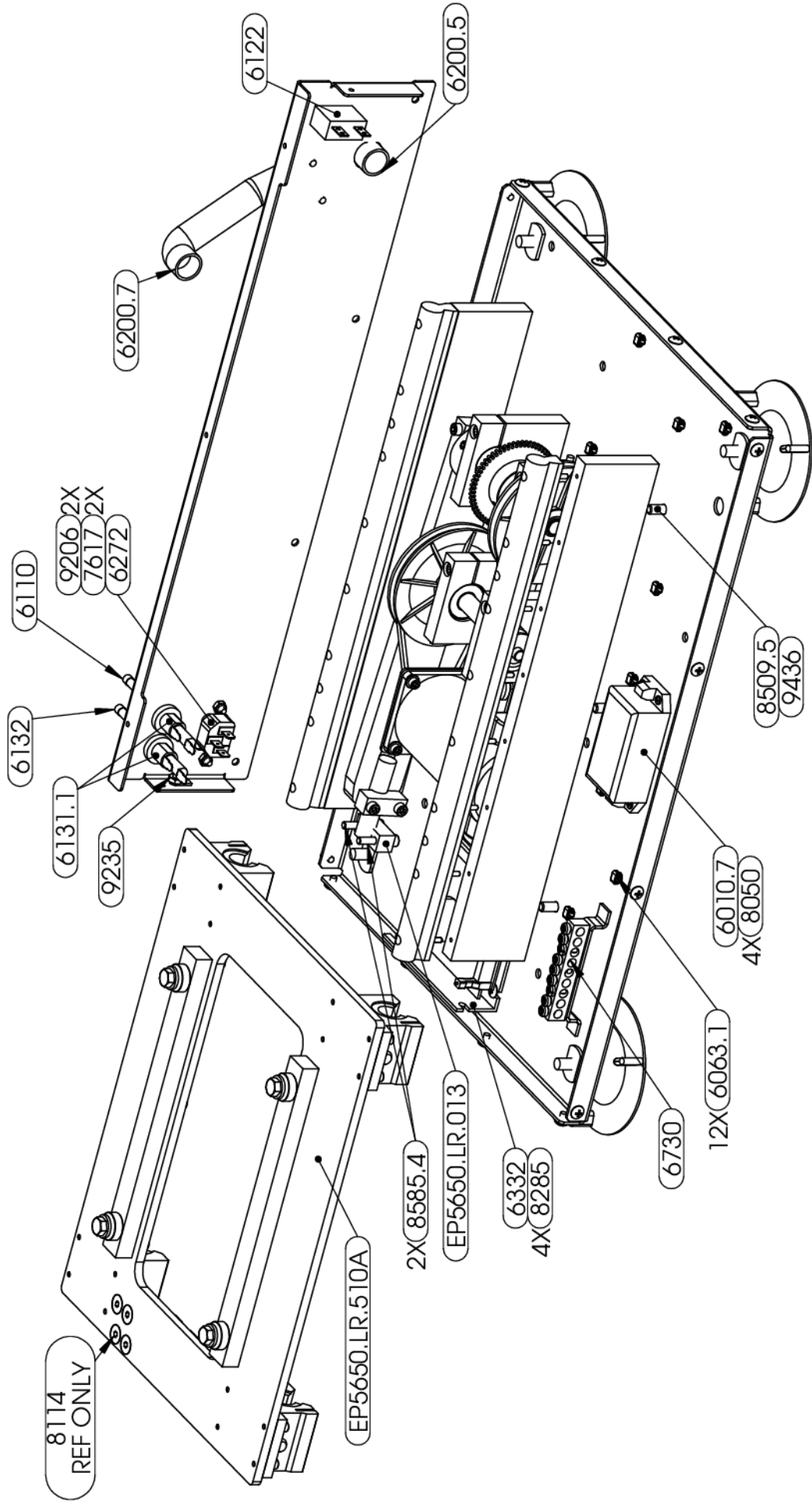
**EBERBACH CORPORATION U.S.A.**

HOT PLATE SHAKER

E6360.00

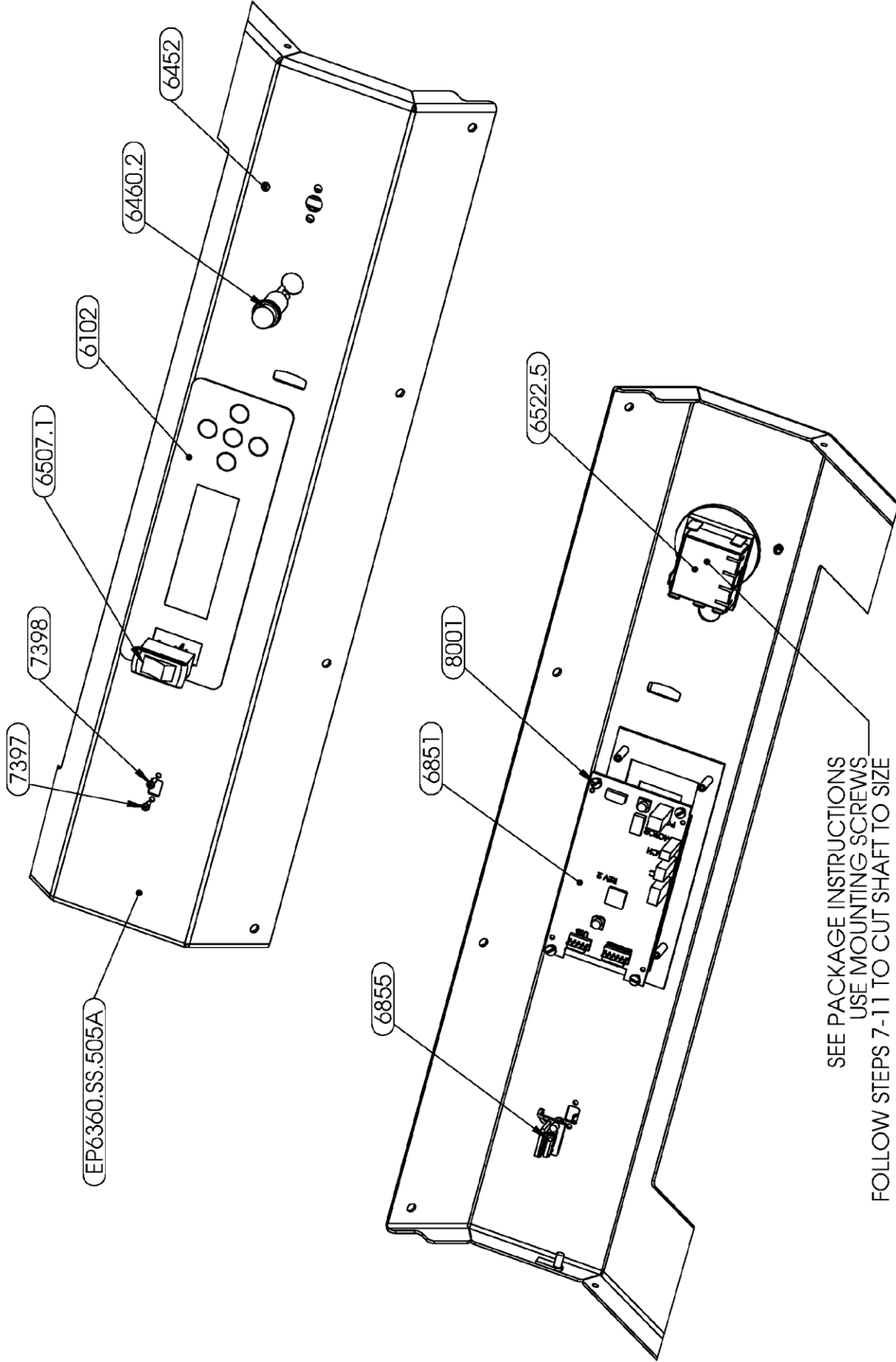
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PART NO.

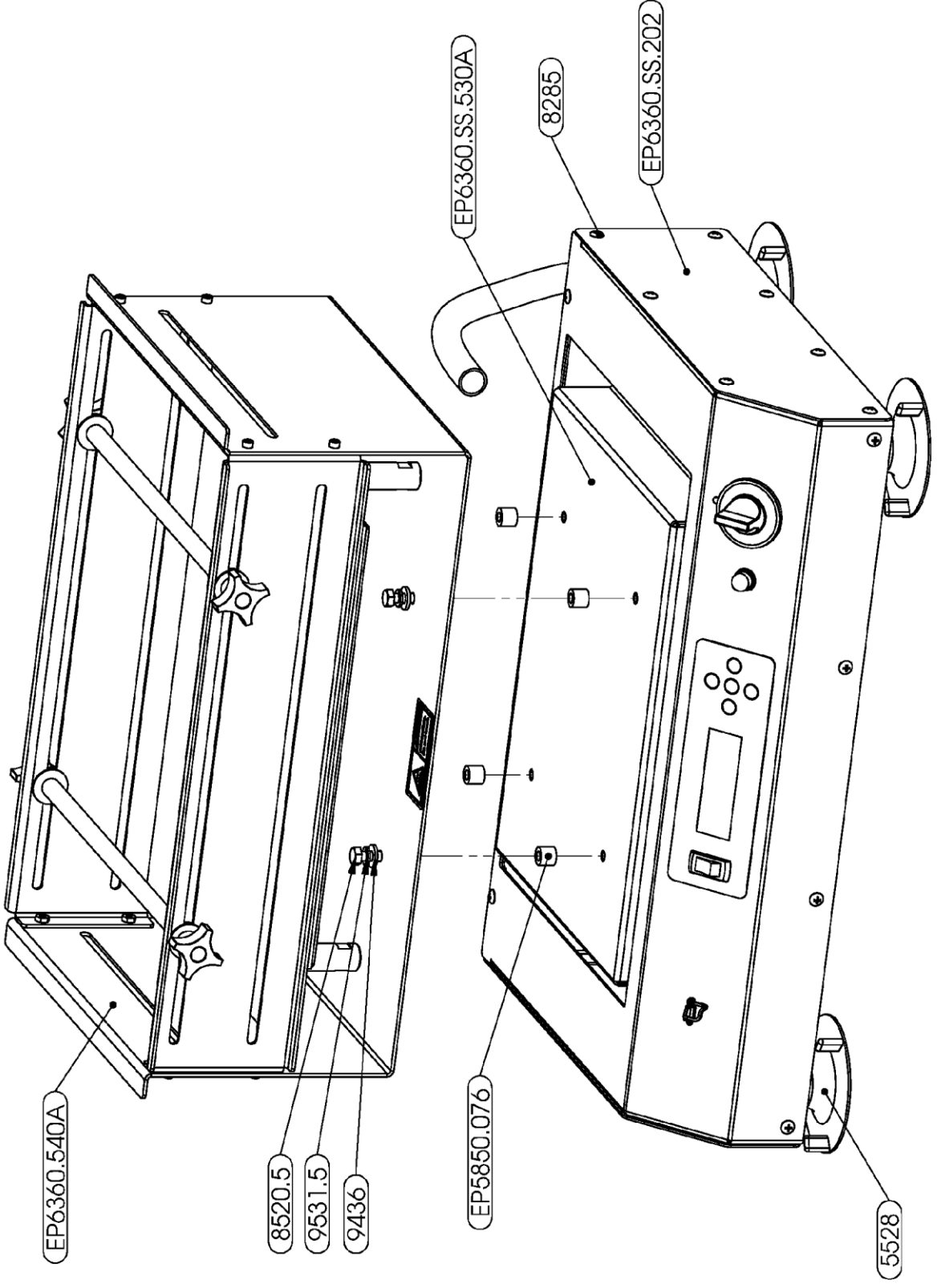


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DIMENSIONS ARE IN INCHES FOR REFERENCE UNLESS OTHERWISE SPECIFIED		MATERIAL		STOCK NO.	
FRACTION	DECIMAL	ASSEMBLY		DATE	REV.
1/16	0.0625	1:4		09-11-19	A-01+
ANGLE	±.5°	APPR	DPT.	WEIGHT	
3RD ANGLE PROJ.		T.L.	DRW.	E6360.00	
		PART NAME		PART NO.	
		BENCHTOP HOT PLATE SHAKER		E6360.00	



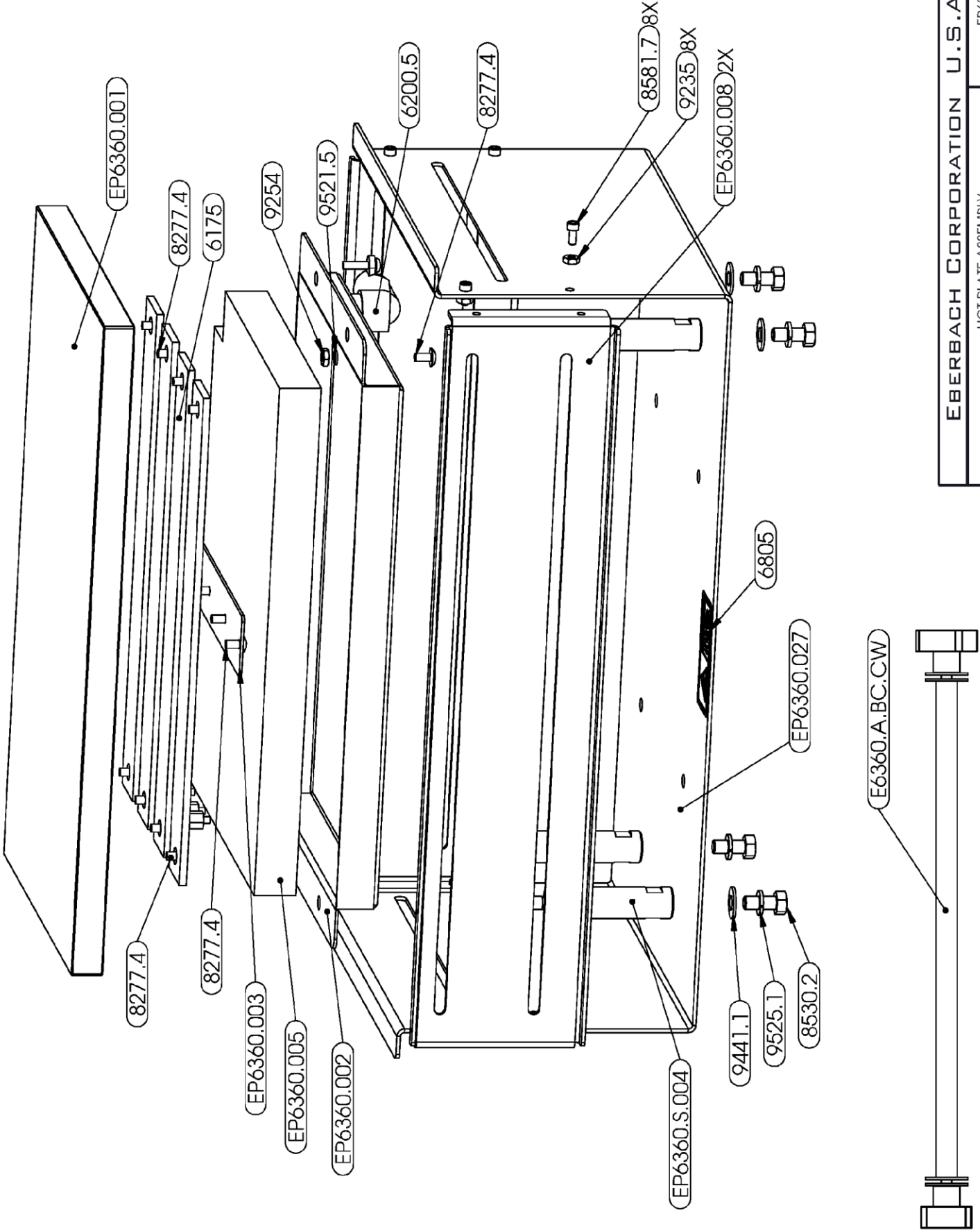
SEE PACKAGE INSTRUCTIONS  
 USE MOUNTING SCREWS  
 FOLLOW STEPS 7-11 TO CUT SHAFT TO SIZE



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 Drawing Name: HOT PLATE SHAKER

PART NO. E6360.00





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HOT PLATE ASSEMBLY

Drawing Name

PART NO. EP6360.540A

