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## INTRODUCTION

The SUITMATE® is a high-speed swimsuit water extractor. It is powered by a 1/3 horsepower, 115V / 60Hz full grounded and fault protected electric motor. The SUITMATE® weighs approximately 53 pounds.

This manual contains service procedures for the SUITMATE® including maintenance information, a troubleshooting guide, a wiring diagram, and a parts list.

The SUITMATE® should only be worked on by a qualified mechanic-electrician, or maintenance individual.

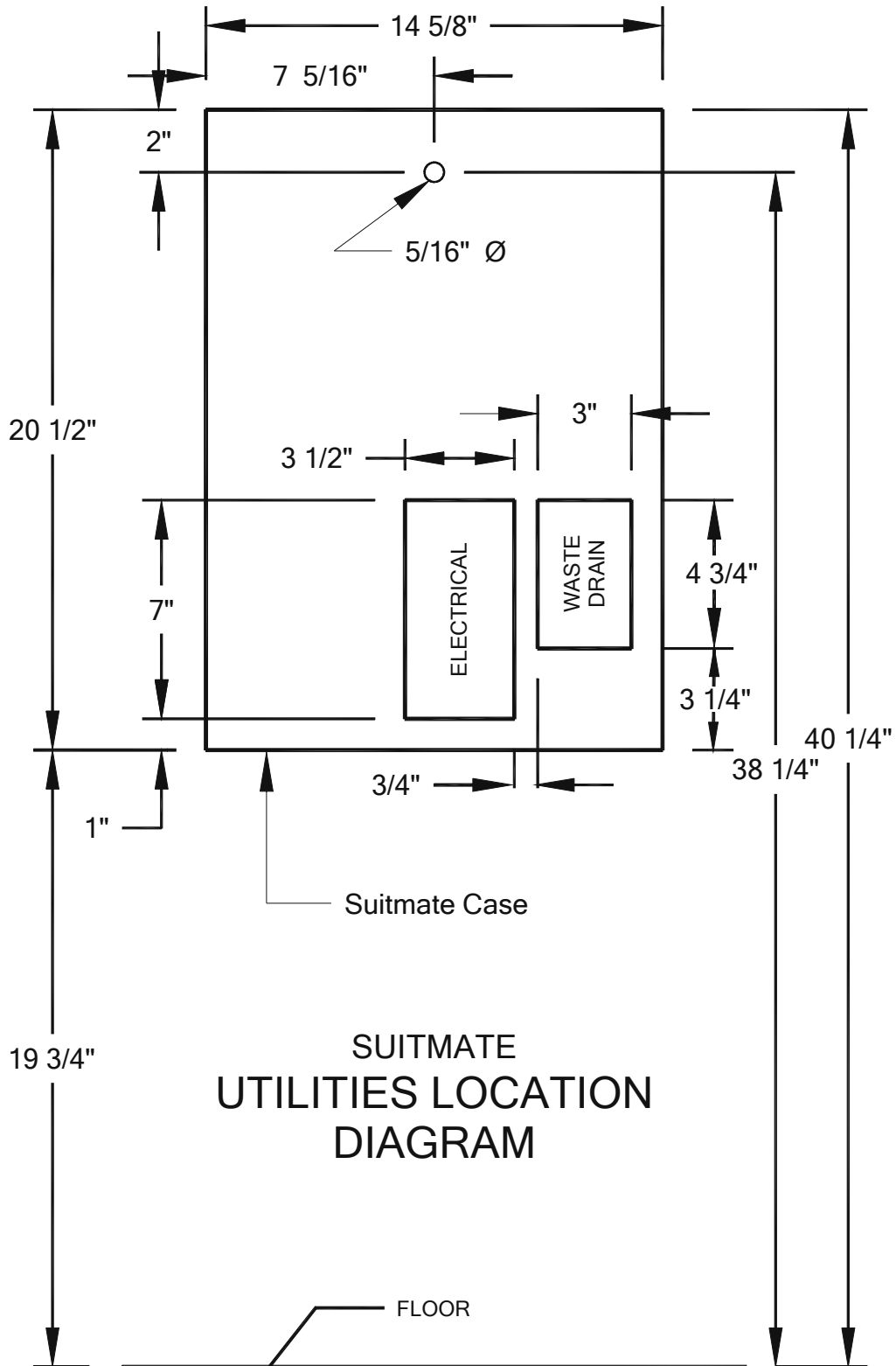
All maintenance and troubleshooting procedures are located in the appropriate sections of this manual.

Follow the service procedures carefully. Always note the location and position of parts and wires before removing them so that reassembly can be done easily and correctly. If no specific reassembly instructions are given, simply reverse the disassembly procedure.

## SAFETY

When servicing the SUITMATE®, observe the following safety precautions:

- Always turn off the power at the circuit breaker - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel - and disconnect the unit before doing any work on the SUITMATE®. Simply turning off a switch is **NOT** enough.
- Use only proper tools, test equipment, and work practices when servicing the SUITMATE®. If there are any questions concerning proper tools, equipment or practices, please call the factory for recommendations at (800) 553-3353.
- Due to critical tolerances, use only specified replacement parts. See the SUITMATE® PARTS AND ASSEMBLIES section of this manual.



# INSTALLATION

The SUITMATE® Swimsuit Water Extractor has been designed and manufactured with safety as our primary consideration. Therefore, it is important that the unit be installed correctly. It is also important that the installation comply with all local building codes and regulations. Please consult your local licensed plumbing and electrical engineers or contractors about your installation. Read the entire INSTALLATION instructions before beginning your installation. Remember: *DO IT RIGHT* and *DO IT SAFE!*

## PROPER LOCATION FOR THE SUITMATE®

Following is a list of factors to consider in determining a location for the SUITMATE®.

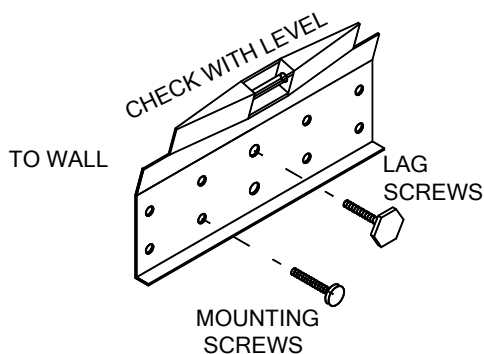
1. The unit should be located in an area that is near where people remove and rinse out their swimsuits.
2. The unit should NOT be located in a cluttered area or where it is exposed to direct shower water or water hose down.
3. The unit should be mounted on a wall structure that will support the unit's approximate 53 pounds hanging weight plus the added weight or pressure of people leaning on the unit. Consult the PROPER WALL MOUNTING section of these instructions to determine an appropriate location.
4. There should be a means to dispose of the wastewater from the unit. Consult the PROPER DRAINAGE section of these instructions to determine an appropriate location.
5. The unit should be wired to 115-volt (AC), 20-ampere 60Hz *dedicated circuit*. Consult the PROPER ELECTRICAL CONNECTIONS sections of these instructions to determine proper location.

## PROPER WALL MOUNTING OF THE SUITMATE®

The SUITMATE® should be mounted to the wall with the Mounting Bracket that is provided with the unit. The SUITMATE® UTILITIES LOCATION DIAGRAM (page 4) shows the recommended location for the mounting holes, the electrical service, and the wastewater outlet (if utilized). The SUITMATE® Mounting Bracket must be secured to a wall stud, or to concrete block or cinder block wall.

### WARNING!

*Anchors in drywall are not sufficient to mount the SUITMATE®.*



### Locating and Securing the Mounting Bracket to the Wall

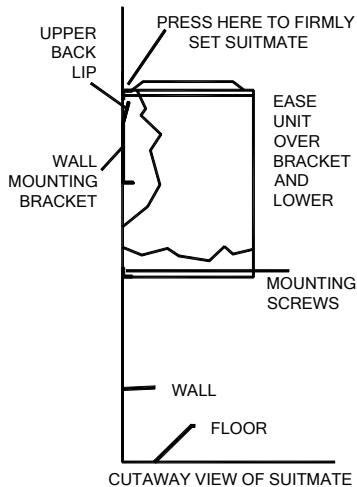
The recommended height from the floor to the top of the SUITMATE® is 42 inches. At least an additional 10 inches of clearance above the SUITMATE® is needed for the opening and closing of the lid. This means that the top edge of the Mounting Bracket should be 40 1/4 inches from the floor. Use the SUITMATE® UTILITIES LOCATION DIAGRAM to determine a location on the wall that provides adequate clearance, a strong and secure place for the Mounting Bracket as well as easy access to electrical and drainage connections.

**WARNING!**

*The Mounting Bracket must be level after secured to the wall.*

To secure the Mounting Bracket to a stud, center the Bracket on the stud and mark on the wall or the stud the locations of the two vertical center holes of the Mounting Bracket. Drill the marked locations with a 1/8-inch drill bit. Make certain the Mounting Bracket will be level after it is secured to the wall. Reposition the Mounting Bracket over the two holes. Drill the outer two holes to receive wall anchors. Install the wall anchors.

Secure the Mounting Bracket to the stud by using two 5/16 x 2 inch lag screws through the two vertical center holes. Make certain the Bracket is level. Finish securing the Bracket with the appropriate fasteners in the outer two holes. For mounting to concrete, etc., use at least four No. 10 or larger screws fastened into appropriate anchors. After the Bracket has been anchored to the wall and the electrical and drainage requirements have been allowed for, the SUITMATE® is ready to be mounted to the wall.



### Mounting the SUITMATE® to the Wall

Remove all packaging material from the SUITMATE® including material around the Motor and the shipping board on the bottom of the unit. The upper back lip of the SUITMATE® should be lowered down and centered on the Bracket. After the unit is centered, push down on the back of the unit to make certain that it is securely wedged onto the Bracket. Make certain the unit is level. If it is not level, remove the unit, adjust the Mounting Bracket and re-hang the unit. A level installation is necessary to minimize vibration and insure proper drainage of wastewater. Finish securing the unit to the wall using appropriate fasteners and anchors on the lower mounting channel at the bottom rear of the unit. This will prevent the unit from being lifted from the Bracket or being moved.

## PROPER DRAINAGE FOR THE SUITMATE®

**Note:** *Strictly follow all applicable local plumbing codes and regulations.*

### To a Floor Drain

Drainage of the wastewater to a floor drain should be done ONLY IN an area where the floor is normally wet. DO NOT drain water across a floor where people do not expect to encounter a wet and slippery condition. SUITMATE® comes with a short flexible floor drain extension tube connected with a stainless steel hose clamp to its drain tailpiece.

**WARNING!**

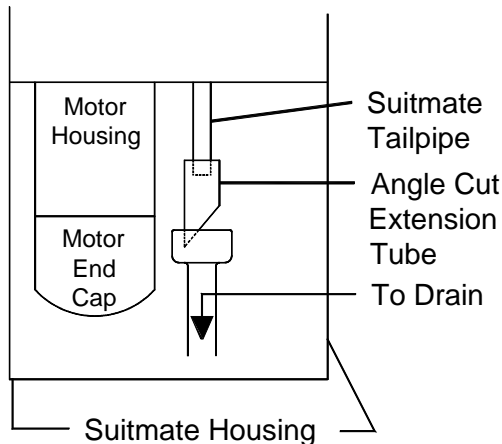
*The drain tube that comes with the unit must not be removed unless the unit is connected to an approved wastewater outlet or the factory-supplied tube is replaced with another tube according to the following instructions.*

### Replacing the Factory Drain Tube with a Longer Drain Tube

Use a 1-1/4 inch I.D. drain tube with a smooth interior that will not crimp or collapse. Use the stainless steel hose clamp that is provided with the factory flexible floor drain extension tube to secure the replacement tube to the unit's drain tailpiece. Run the drain tube so that it is never higher than the bottom of the SUITMATE® and always slopes down. Secure the drain tube to the wall or floor with properly sized "U" clamps so it cannot be maneuvered to trap wastewater. Cut off the end of the drain tube on an angle to help prevent it from being blocked by the floor, wall, or some other object. Upon completion of the installation, check to make certain that there is a free flow of water from the drain tube extension.

## To an Approved Sanitary Waste Line

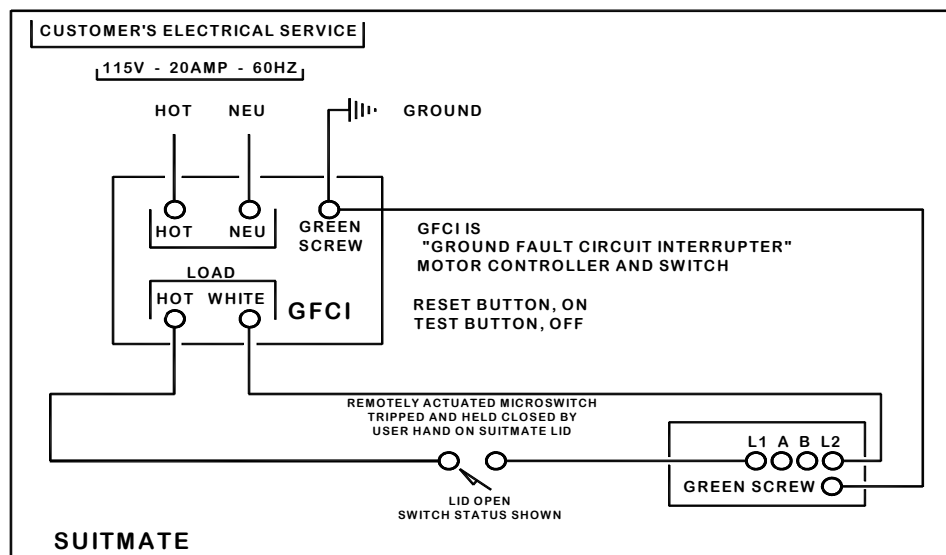
This installation should only be done in accordance with all applicable local plumbing codes and regulations. The unit's 1-1/4 inch O.D. drain tailpiece is designed for connection with standard compression type plumbing fittings. There is room inside the housing for the use of a standard "P" type plumbing connection. The waste outlet should be located in the wall behind the unit. The SUITMATE® INSTALLATION TEMPLATE shows the appropriate location for the waste duct.



If an open-site drain connection is required and the open site is to be positioned within the SUITMATE® housing, locate the top of the receiver pipe below the top of the Motor end cap, and locate the top outer edge of the receiver pipe at least 1-1/4 inches from the body of the Motor. (See also the SUITMATE® INSTALLATION TEMPLATE.) Be certain that the cut off end of the drain extension tube is below the top of the receiver with the angle cut facing away from the Motor as illustrated.

## PROPER ELECTRICAL CONNECTIONS FOR THE SUITMATE®

**Note:** Strictly follow all applicable local electrical codes and regulations.



The SUITMATE®, is equipped with a ground fault circuit interrupter (GFCI), and is designed to be connected to a 115 volt, 20 ampere 60 Hz *dedicated circuit* that is protected by a fuse or circuit breaker. **A PLUG-IN INSTALLATION IS NOT ACCEPTABLE!** The utilized circuit must be run to the SUITMATE® weatherproof Junction Box that contains the GFCI. A liquid tight raceway such as Ultralight® Liquid Tight Flexible Conduit (or the equivalent) should be used from the circuit

connection to the Junction Box. The SUITMATE® INSTALLATION TEMPLATE shows the location of the suggested area behind the unit for the entrance of the electrical raceway that does not interfere with the drainage connection.

**WARNING!**

*Do not route the raceway where wastewater can flow or drip on it.*

Remove the cover of the weatherproof Junction Box, which contains the GFCI, and remove the GFCI mounting screws. The circuit ground conductor must be connected to the green grounding screw located on the GFCI. If no ground is available on the circuit utilized, you *must provide* a proper ground for the SUITMATE®. The hot and neutral leads of the power circuit should be connected to the GFCI screw terminals marked "LINE". Connect the hot lead to the terminal marked "HOT" and the neutral lead to the terminal marked "WHITE". After the correct electrical connections have been properly made, remount the GFCI using the screws previously removed. Reinstall the weatherproof Junction Box cover previously removed. This cover provides access to the GFCI "TEST" and "RESET" buttons.

## POSTING THE WALL SIGN

It is important that the wall sign included in the INSTALLATION PACKAGE be mounted on the wall above the unit. Locate the bottom edge of the sign six inches above the SUITMATE®. At this height the sign will not be blocked when the lid is raised. It will also serve as a stop to keep the Lid from striking the wall behind the unit.

The sign has an adhesive foam strip around the perimeter of the backside. Be certain the surface that the sign is to be mounted to is clean and dry. Without touching the sign to the wall, align the sign six inches above the unit and at its center. Press the sign to the wall and rub firmly over the adhesive portion of the sign.

## TESTING AND OPERATION

After the mounting and all connections are complete, test the SUITMATE® as follows:

1. Make certain all packaging material is removed from the unit including material around the Motor and the shipping board on the bottom of the unit.
2. Check to see that the Basket is empty and that the Lid moves freely.
3. Press down on the Lid and hold down for several seconds. The unit should run smoothly and there should be no excessive vibration or noise.
4. Release and lift the Lid from the down position. The Basket should stop rotating within a second or two.
5. Test the SUITMATE® by putting a wet swimsuit in the unit according to the instructions on the underside of the Lid. If there is excessive vibration or noise it is usually caused by the improper loading of the swimsuit. Be certain that the swimsuit is pushed to the bottom of the Basket and that all material is at least two inches below the top of the Basket.

## INSTALLATION TROUBLESHOOTING

If the SUITMATE® does not operate, check the following:

1. Check to see if there is power to the unit. Check the circuit using an A.C. voltmeter set to the appropriate range; measure across the "LINE" side of the GFCI.
2. Make certain that the GFCI switch is in the "ON" position. The reset button must be depressed to turn on the GFCI.
3. Check the connections on the GFCI Junction Box. Be certain there is power on the "LOAD" side of the GFCI.
4. Check the SUITMATE® TROUBLESHOOTING section in this manual for additional troubleshooting assistance.



## **FINISHING THE INSTALLATION**

Be certain to save this SUITMATE® MANUAL for future reference. If you need additional information, call the Extractor Corporation at 800-553-3353. With proper installation, use, and maintenance your SUITMATE® Swimsuit Water Extractor will provide you with years of trouble-free service.

# EXCHANGE PROCEDURE

## SUITMATE<sup>®</sup> Exchange Program

The EXCHANGE PROCEDURE is to be used to effect the exchange of SUITMATE<sup>®</sup> units under the "Suitmate<sup>®</sup> Exchange Program".

**Note:** Retain ALL of the packaging material that the Exchange unit was delivered in.

### REMOVAL OF DEFECTIVE SUITMATE<sup>®</sup>

1. Shut off power to the SUITMATE<sup>®</sup> circuit at the power panel - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel - and disconnect the unit before doing any work on the SUITMATE<sup>®</sup>. Simply turning off a switch is *NOT* enough.
2. Remove the cover of the weatherproof Junction Box, which contains the GFCI; remove the GFCI mounting screws; disconnect the power feed wires from the GFCI terminals marked "LINE" and disconnect the ground wire. Refasten the GFCI to the unit. The Exchange unit contains a GFCI.
3. Disconnect the power feed liquid tight raceway from the Junction Box.
4. Loosen the drain tube hose clamp or the P-trap compression fittings and slide the drain tube or P-trap off the unit's tailpiece.
5. Remove the lower fasteners anchoring the unit to the wall.
6. Lift the unit up to remove it from the Mounting Bracket.

### INSTALLATION OF THE EXCHANGE SUITMATE<sup>®</sup>

1. When taking the Exchange unit out of the carton, be careful not to damage the carton as it will be needed to return the defective unit.
2. Hang the Exchange unit on the Mounting Bracket by lowering the upper lip of the SUITMATE<sup>®</sup> Case over the top edge of the Mounting Bracket. Be certain that the Exchange unit is centered on the mounting Bracket. Ease the SUITMATE<sup>®</sup> all the way down on the Bracket and press down on both sides of the plastic Top at the back of the unit so it is firmly set in place. Check that the unit is level. If it is not level, remove the unit, adjust the Mounting Bracket, and re-hang the unit. A level installation is necessary to minimize vibration and ensure proper drainage of wastewater.
3. Securing the lower mounting channel to the wall by reinstalling the fasteners removed in step 5 above completes mounting.
4. Reinstall the drain tube or P-Trap that was removed in step 4 above. Secure all wall connections.
5. Reconnect the power feed liquid tight raceway to the Junction Box, and the power leads and the ground wire that were disconnected above. Be certain the hot lead is connected to the GFCI terminal marked "HOT" and "LINE", and the neutral lead is connected to the GFCI terminal marked "WHITE" and "LINE".
6. Secure the GFCI and your weatherproof Junction Box cover to the Junction Box.

#### **WARNING!**

*For user safety it is imperative that the ground wire conductor be reconnected and the GFCI is operating properly. If no ground conductor was provided at the original installation, provide one now.*

## TESTING OF THE EXCHANGE UNIT

After the mounting and completion of all connections, test the SUITMATE® as follows:

1. Make certain all packaging material is removed from the unit including material around the Motor and the shipping board on the bottom of the unit.
2. Turn on the power to the SUITMATE® circuit at the power panel.
3. Check to see that the Basket is empty and that the Lid moves freely.
4. Press down on the Lid and hold down for several seconds. The unit should run smoothly and there should be no excessive vibration or noise.
5. Release and lift the Lid from the down position. The Basket should stop rotating in less than two seconds.
6. Test the SUITMATE® by putting a wet swimsuit in the unit according to the instructions on the underside of the Lid. If there is excessive vibration or noise it is usually caused by the improper loading of the swimsuit. Be certain that the swimsuit is pushed to the bottom of the Basket and that all material is at least two inches below the top of the Basket.

## INSTALLATION TROUBLE SHOOTING

If the SUITMATE® does not operate, check the following:

1. Make certain that there is power to the unit by using an A.C. voltmeter set to the appropriate range.
2. Depress the GFCI "RESET" button.
3. Check the connections in the GFCI Junction Box. Check if there is power on the "LOAD" side of the GFCI using an A.C. voltmeter set to the appropriate range.
4. Check the SUITMATE® TROUBLESHOOTING section in this manual for additional troubleshooting assistance.

## PACKAGING THE DEFECTIVE SUITMATE® FOR RETURN

1. Please use all packaging materials used with the Exchange unit.
2. Use the cardboard Motor sleeve and be certain it is properly installed around the Motor. Check that the Styrofoam Motor prop is in the cardboard sleeve and under the Motor.
3. It is essential to secure the bottom hardboard support to the defective unit with the screws provided with the Exchange unit.
4. Place the unit Case sleeve into the shipping carton first with the plain end nesting down into the bottom folded supports. The end of the sleeve with the flaps should be at the top. Lower the defective unit into the sleeve.
5. Place the Styrofoam Lid prop under the Lid.
6. Insert the two folded cardboard supports on top of the unit at 90° to each other.
7. Close and seal the carton with packaging tape.
8. Affix the prepaid UPS label to the carton and give the carton to UPS or call Extractor Corporation at 800-553-3353 for a pickup.
9. For questions, call the Extractor Corporation at 800-553-3353.

We hope that the Exchange Program has worked satisfactorily for you and we would appreciate any comments or suggestions you might have to improve our service.

# MAINTENANCE

These instructions are designed to keep your SUITMATE® clean and operating properly. The procedures should be followed at the recommended frequencies.

## WEEKLY

### 1. Inspection

Pull the Basket to the side and check with a flashlight for trapped debris such as straps, strings, bathing caps, etc., inside the SUITMATE®. If foreign objects or debris are found, remove them with a coat hanger or other implement.

### 2. Hygienic Cleaning

#### **WARNING!**

*Never use flammable solvents in or on the SUITMATE®.*

- a. Mix a disinfecting cleaner at recommended strength in a 1/2-gallon bucket of water.
- b. Clean the inside of the unit by spinning a small soft hand towel soaked in the cleaning solution. Repeat two or three times.
- c. Use the spun towel to wipe down the Lid, plastic Top, sides and Basket.

#### **WARNING!**

*When cleaning around the unit, do not allow water to splash up under the unit as water can get into the Motor and damage it.*

### 3. Flushing

- a. If your unit uses a drain hose or a P-trap, disconnect it from the unit's drain tail piece and inspect it for any obstruction.
- b. With the drain hose or P-trap removed, place an empty (1/2-gallon capacity) bucket under the tailpiece to catch the flush discharge.
- c. Slowly pour 1/2-gallon or less of cleaner water (use the disinfecting cleaner water from step a. in "Hygienic Cleaning" above for this procedure) into the top opening of your unit. If the unit's drainage channels are open, the full amount of water poured into the unit should flow into the bucket within a few seconds. Check the discharge water for debris.
- d. Repeat the 1/2-gallon flushes with fresh water until a free flow of water is established and the discharge water is clear of debris.
- e. If you cannot establish free flow of water or if the discharge water spills out from under the unit, the tailpiece is plugged or the drain channels are blocked. Locate the blockage by pushing the Basket aside with one hand and, with a flashlight, determine where the blockage is and remove it. Repeat FLUSHING steps c. and d.
- f. Reinstall the disconnected drain hose or P-trap.

## MONTHLY

### 1. Case and Top care

- a. Clean the black plastic Top with Armor All® (or its equivalent).
- b. Clean and polish the stainless steel Case with Liquid Gold® (or its equivalent). If flat rust or stains are present use a medium grade steel wool to remove them. Be certain to rub with the grain of the Case (up and down - not sideways). Follow with Liquid Gold® for cleaning and polishing.

### 2. Testing the GFCI

Test the GFCI and record the results. The "TEST" and "RESET" buttons are on the face of the GFCI under the flip cover of the weatherproof Junction Box in the rear of the unit.

*If the unit does not operate, check the TROUBLESHOOTING section in this manual. If you have any questions or problems, please call Extractor Corporation at 800-553-3353.*

# TROUBLESHOOTING

If you are having problems with your SUITMATE® please read through the numbered questions below to see if the condition you are experiencing is described and answered. If you still have difficulty or wish to participate in the Exchange Program, call the Extractor Corporation at 800-553-3353.

## 1. Is the unit dead? No sound, hum, etc., when the Lid is held down?

**NO.** Go to question 2.

**YES.** Is there power to the unit?

**YES.** Go to question 1A.

**NO.** To make certain there is no power to the unit, use an A.C. voltmeter set to the appropriate range and measure across the "LINE" side of the GFCI.

### 1.A. Is the GFCI tripped out?

**YES.** Reset the GFCI by pressing the red button.

**NO.** Go to question 1.B.

### 1.B. Is the Microswitch working?

Test the Microswitch by slowly depressing the Lid and listening for a faint click.

**YES.** There is some other problem with the unit and an Exchange may be recommended.

**NO.** The Microswitch may be out of adjustment. Consult the SUITMATE® MICROSWITCH ADJUSTMENT PROCEDURE in this manual.

## 2. Does the unit hum, but not operate, when the Lid is held down?

**NO.** Go to question 3.

**YES.** Does the basket spin freely? Test by depressing the Brake Rods manually and trying to spin the basket.

**YES.** There is some other problem with the unit and an Exchange may be recommended.

**NO.** Something may be obstructing the Basket. Pull the Basket to the side and, with a flashlight, look for an obstruction. Remove the obstruction. If the obstruction cannot be removed, an Exchange may be recommended.

## 3. Does the unit Leak?

**NO.** Go to question 4.

**YES.** There is probably an obstruction, of the drain hose or drain channel. Remove the drain hose and make certain it is not plugged. The drain channel is a two-inch U channel that runs around the perimeter of the interior of the unit. Check for an obstruction by pulling the Basket aside and, with a flashlight, look for something blocking the drain channel or hose. If foreign objects or debris are found, remove them with a coat hanger or other implement. If the unit still leaks an Exchange may be recommended.

## 4. Does the unit operate intermittently?

**NO.** Go to question 5.

**YES.** Does the basket spin freely? Test by depressing the Brake Rods manually and trying to spin the Basket.

**YES.** The Motor Thermal Breaker may be faulty.

**NO.** There may be a partial obstruction of the Basket causing the Motor to overheat and the Motor Thermal Breaker to kick out. Check for an obstruction by pulling the Basket aside and, with a flashlight, look for something blocking the drain channel or hose. If

foreign objects or debris are found, remove them with a coat hanger or other implement. If the unit still leaks an Exchange may be recommended.

**5. Does the GFCI keep tripping out?**

**NO.** Go to question 6.

**YES.** Is the unit connected to a 115 volt 20 ampere 60Hz *dedicated circuit*?

**NO.** Provide a 115 volt 20 ampere 60 Hz *dedicated circuit*.

**YES.** The GFCI may be faulty. Check the GFCI with a A.C. voltmeter set to the appropriate range, or by bypassing the GFCI. If the unit does not kick out the main dedicated circuit breaker when bypassing the GFCI, the GFCI is probably faulty and should be replaced. If the GFCI is not faulty, an Exchange may be recommended.

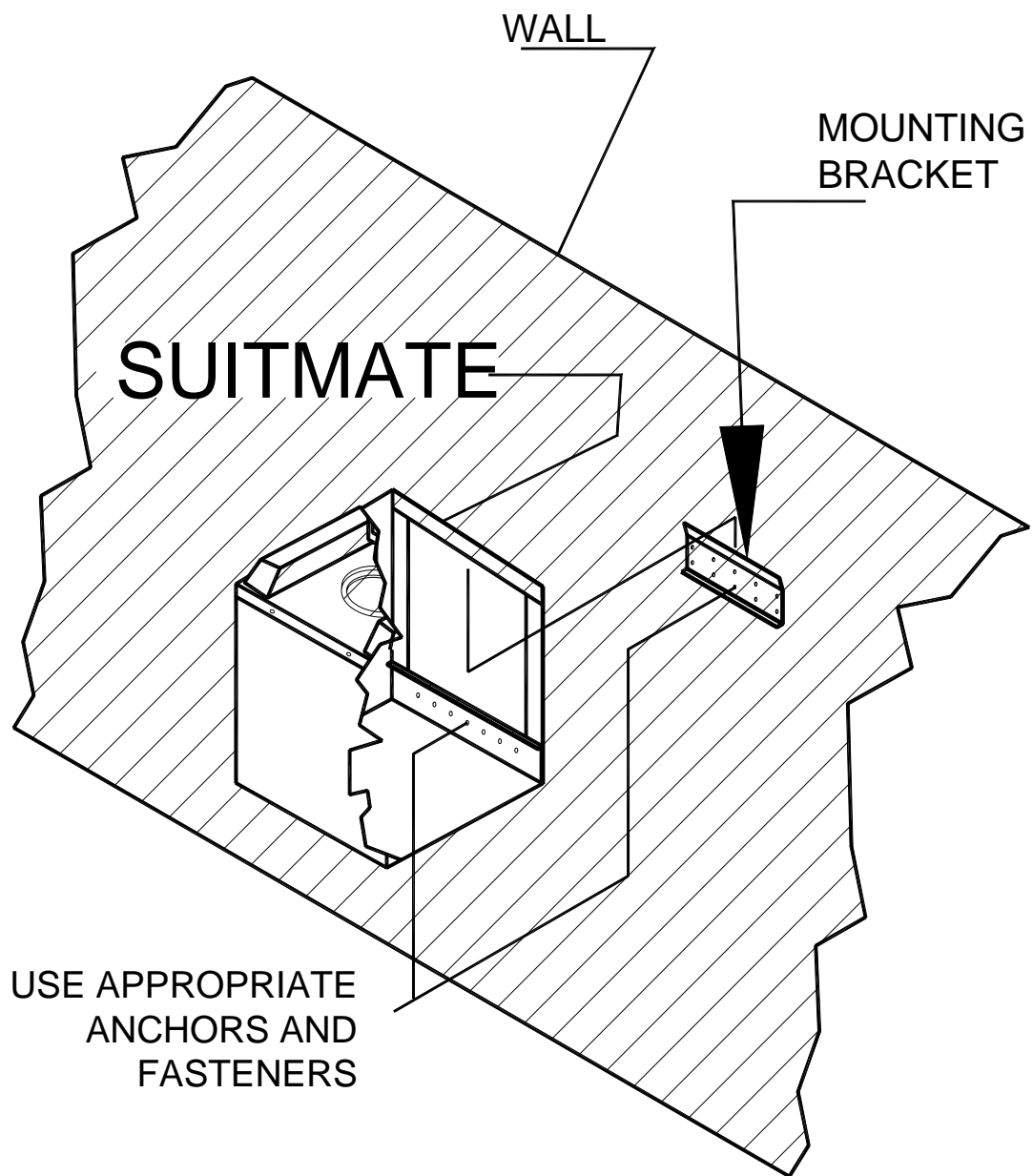
**6. Does the unit make excessive noise?**

**YES.** The patrons may not be operating the unit properly. Test by putting a swimsuit in the Basket and pushing it all the way down, making certain that it is evenly distributed in the bottom. Operate the unit. If the unit is still excessively noisy, an Exchange may be recommended.

**NO.**

If these questions have not led to a satisfactory answer to the problem with the SUITMATE<sup>®</sup>, please call the Extractor Corporation at 800-553-3353. We want you and your patrons to have the benefits of a smoothly operating SUITMATE<sup>®</sup> Swimsuit Water Extractor.







# MECHANICAL ASSEMBLIES

**Note:** Always turn off the power at the circuit breaker - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel - and disconnect the electrical connections before doing any work on the SUITMATE®. Simply turning off a switch is NOT enough. Use only proper tools, test equipment, and work practices when servicing the SUITMATE®.

If there are questions concerning proper tools, equipment or practices, please call the factory for recommendations at 800-553-3353. Due to critical tolerances, use only specified replacement parts. (See the SUITMATE® PARTS AND ASSEMBLIES section in this manual.)

Some disassembly and assembly procedures have not been included, as the procedures seem to be self-evident.

## REMOVE SUITMATE® FROM WALL MOUNTING

### **Do This FIRST**

- Turn off the main electrical power to the unit - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel - and disconnect the unit before doing any work on the SUITMATE®. Simply turning off a switch is NOT enough.
- Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.

### **CAUTION**

*Make certain the main electrical power to the unit is turned off - and locked out - before beginning work on the SUITMATE®.*

1. If the SUITMATE® was installed with hard plumbing (P-trap), disconnect the waste outlet from the unit.
2. Remove the cover of the weatherproof Junction Box that contains the GFCI; remove the GFCI mounting screws; disconnect the ground wire and the power feed lines from the GFCI terminals marked "line". Leave the GFCI fastened to the unit. Retain the weatherproof Junction Box cover and mounting screws, and the GFCI mounting screws, for reinstallation.
3. Disconnect the power feed liquid tight raceway from the Junction Box.
4. Remove the lower fasteners anchoring the unit to the wall.
5. Remove the SUITMATE® from the Mounting Bracket by firmly grasping the sides of the Case bottom and gently lifting straight up until the unit clears the upper back lip of the Mounting Bracket. Take the unit to a workbench.

## REINSTALL THE SUITMATE®

### **CAUTION**

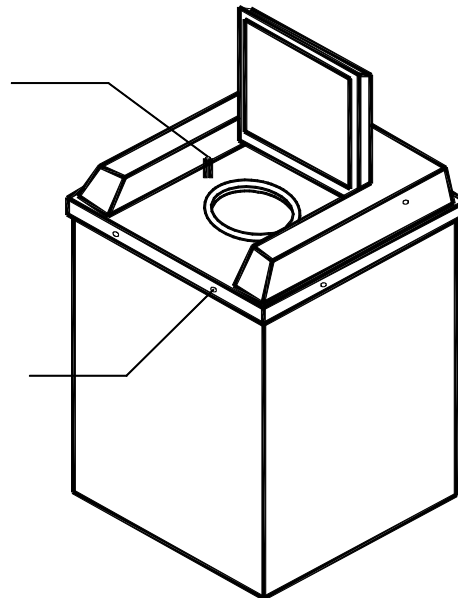
*Make certain the main electrical power to the unit is turned off - and locked out - before beginning work on the SUITMATE®.*

Return the SUITMATE® unit to its proper location and reconnect the unit by reversing the above procedure.

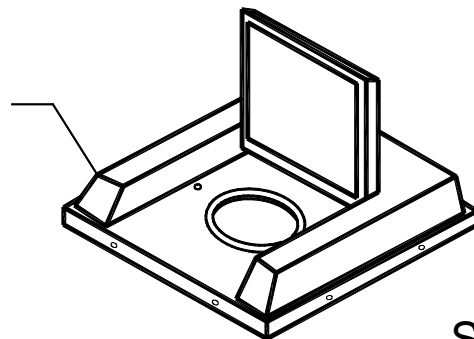
**Note:** Make certain the unit is level. If it is not level, remove the unit, adjust the Mounting Bracket and re-hang the unit. A level installation is necessary to minimize vibration and insure proper drainage of wastewater.

Black Brake Tip  
(2) AEC 1605

Black Aluminum  
Pop Rivet  
(6) AEC 1205



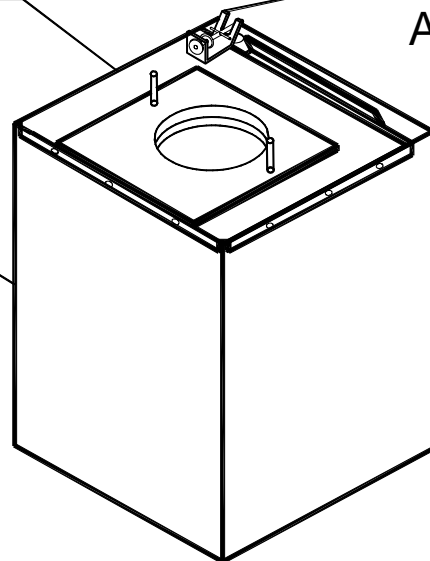
Top Assembly  
with lid (1) EC 4



Sub-Top Assembly  
EC 6

Shuttle  
AEC1304

Case Assembly  
EC12



## REMOVE THE TOP ASSEMBLY

### *Do This FIRST*

- Make certain you have all the necessary parts and fasteners.
- Remove the SUITMATE® from Wall Mounting.

1. Place the SUITMATE® unit in an upright position.
2. Lift the Lid. Remove the Black Rubber Brake Rod Tips from the (2) Brake Rods.
3. Remove the (6) Pop Rivets from around the outer edge of the Black Plastic Top.
  - a. Punch out the center of each rivet with a small drift punch.
  - b. Drill out each rivet

**Note:** Make certain that the drill bit does not reach a depth of more than ½-inch to avoid damaging the plastic liner.

- c. Chisel off the rivet heads. Make certain the rivets are completely removed.

**Note:** The Sub-Top Assembly **MUST** be removed to take out any rivet debris from inside the unit.

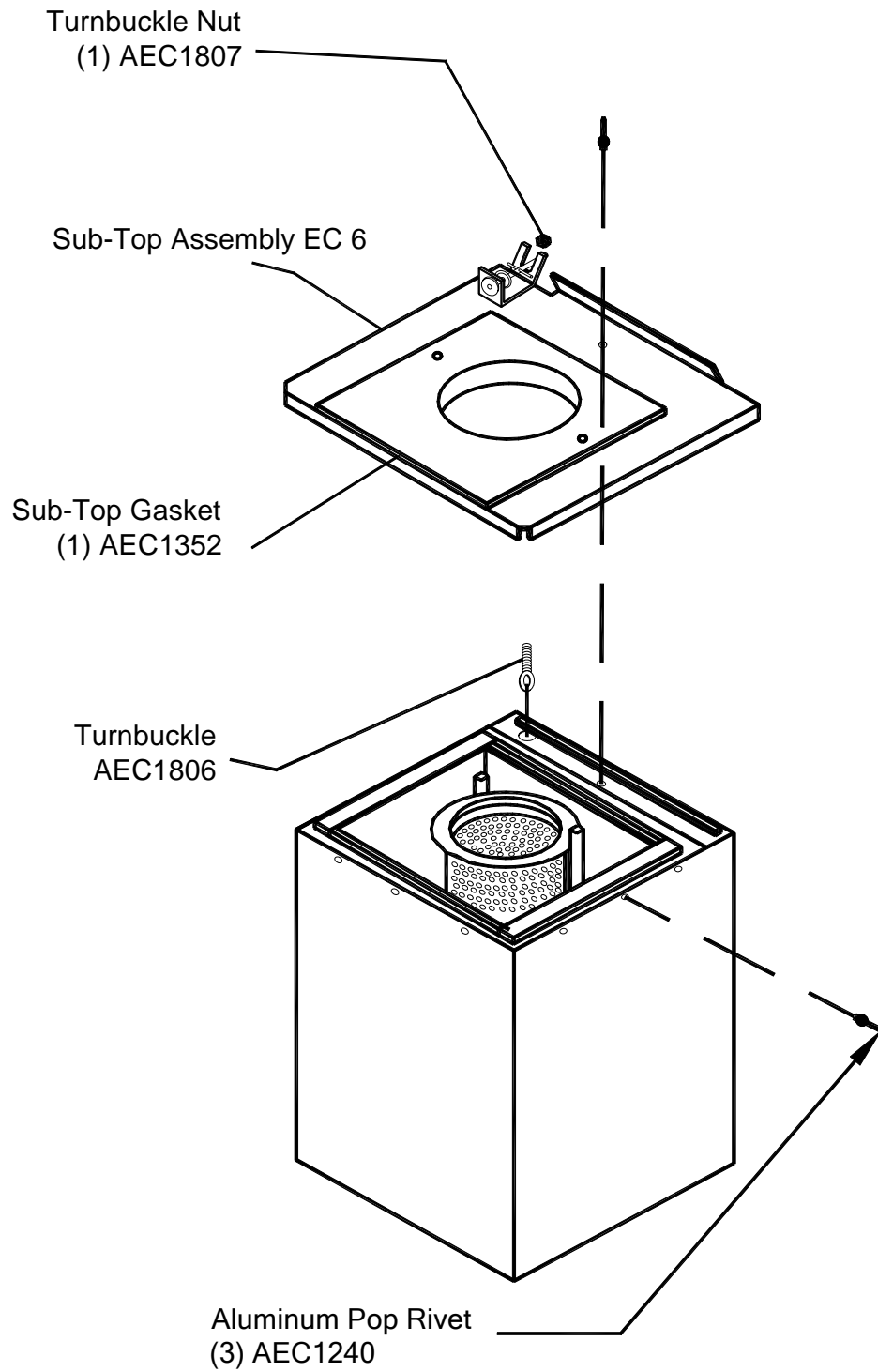
4. Separate the black plastic Top from the unit. Remove the Top by grasping the sides and lifting straight up.
5. Be careful not to bump the Riser Cable Assembly on the Sub-Top. Set the Top aside for reassembly.

## REPLACE TOP ASSEMBLY

**Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.

1. Place the SUITMATE® unit in an upright position.
2. Lift the Lid on the Top Assembly and locate the (2) Brake Rod holes in the Top and align them with the Brake Rods. Push the Top down over the Brake Rods.
3. Align the (6) holes in the lower edge of the Top with the corresponding (6) holes in the Case.
4. Fasten the Top to the Case with six Pop Rivets.
5. Replace the (2) Black Rubber Brake Tips.

**Note:** Check the Microswitch alignment by following the SUITMATE MICROSWITCH ADJUSTMENT PROCEDURE section in this manual.



## REMOVE SUB-TOP ASSEMBLY

### *Do this FIRST*

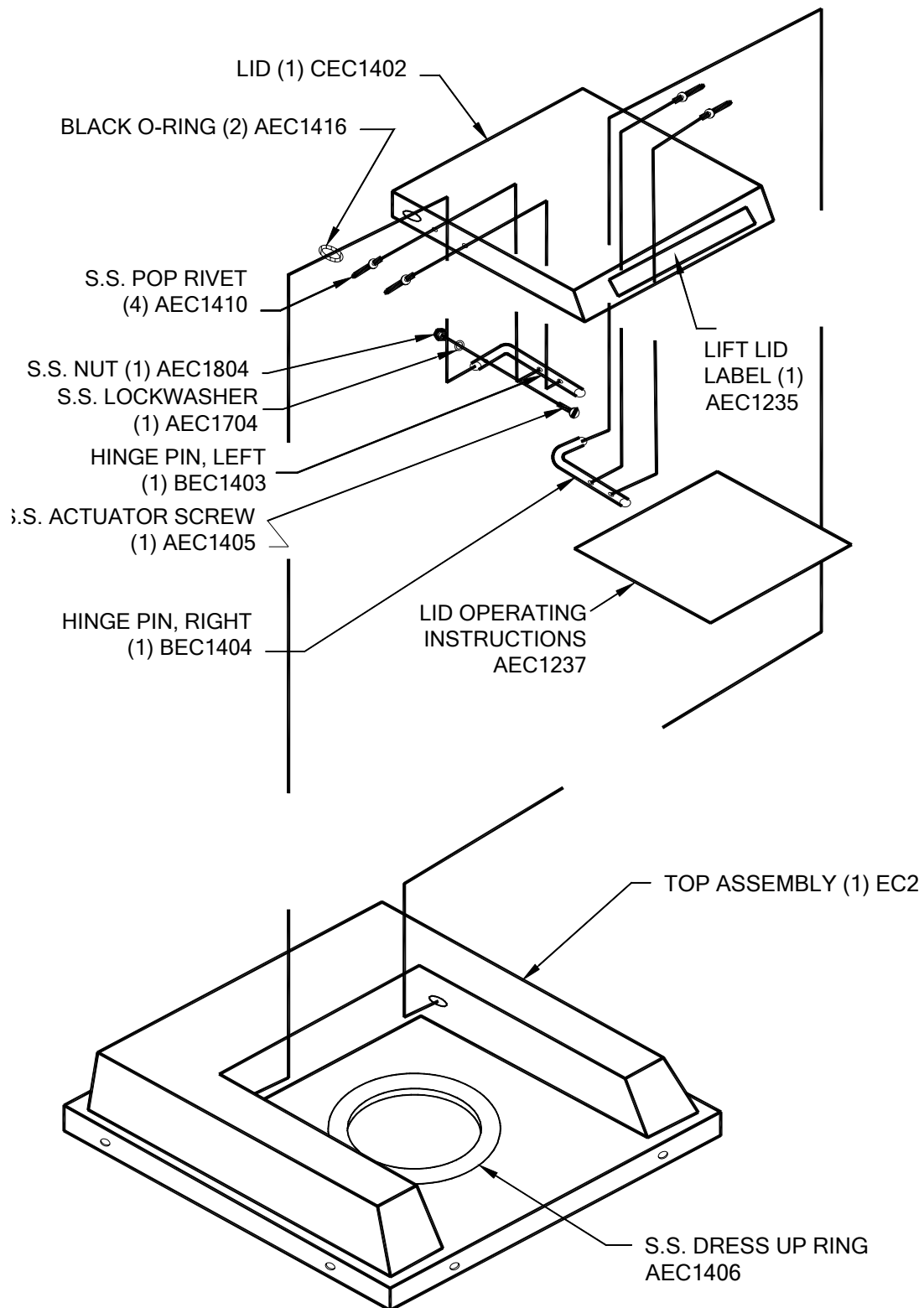
- Make certain you have all the necessary parts and fasteners.
- Remove SUITMATE® from Wall Mounting.
- Remove Top Assembly

1. Place the SUITMATE® unit in an upright position.
2. Remove the nut from the turnbuckle that is attached to the Riser Cable. Set the nut aside for reassembly.
3. Pull the Riser Cable with turnbuckle out of the hole in the riser shuttle.
4. Remove the (2) rivets from around the outer edge of the Sub-Top and the (1) rivet from the top.
  - a. Punch out the center of each rivet with a small drift punch.
  - b. Drill out each rivet.  
*Note: Make certain the drill bit does not reach a depth of more than ½-inch to avoid damaging the plastic liner.*
  - c. Chisel off the rivet heads. Make certain the rivets are completely removed.
5. Separate the Sub-Top from the SUITMATE®. Remove the Sub-Top by grasping the sides and lifting straight up.
6. Remove rivet debris and any other foreign objects from the liner.

## REPLACE SUB-TOP ASSEMBLY

*Note: Consult the SUITMATE® PARTS AND SUB-ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.*

1. Locate the (2) Brake Rod holes in the Sub-Top gasket and align them with the Brake Rods. Push the Sub-Top down over the Brake Rods.
2. Align the (3) holes in the Sub-Top (one on each side and one on the top) with the respective holes in the Case.  
*Note: Make sure that the lip of the Sub-Top is outside the Case.*
3. Pop rivet the Sub-Top to the Case.



## REMOVE LID

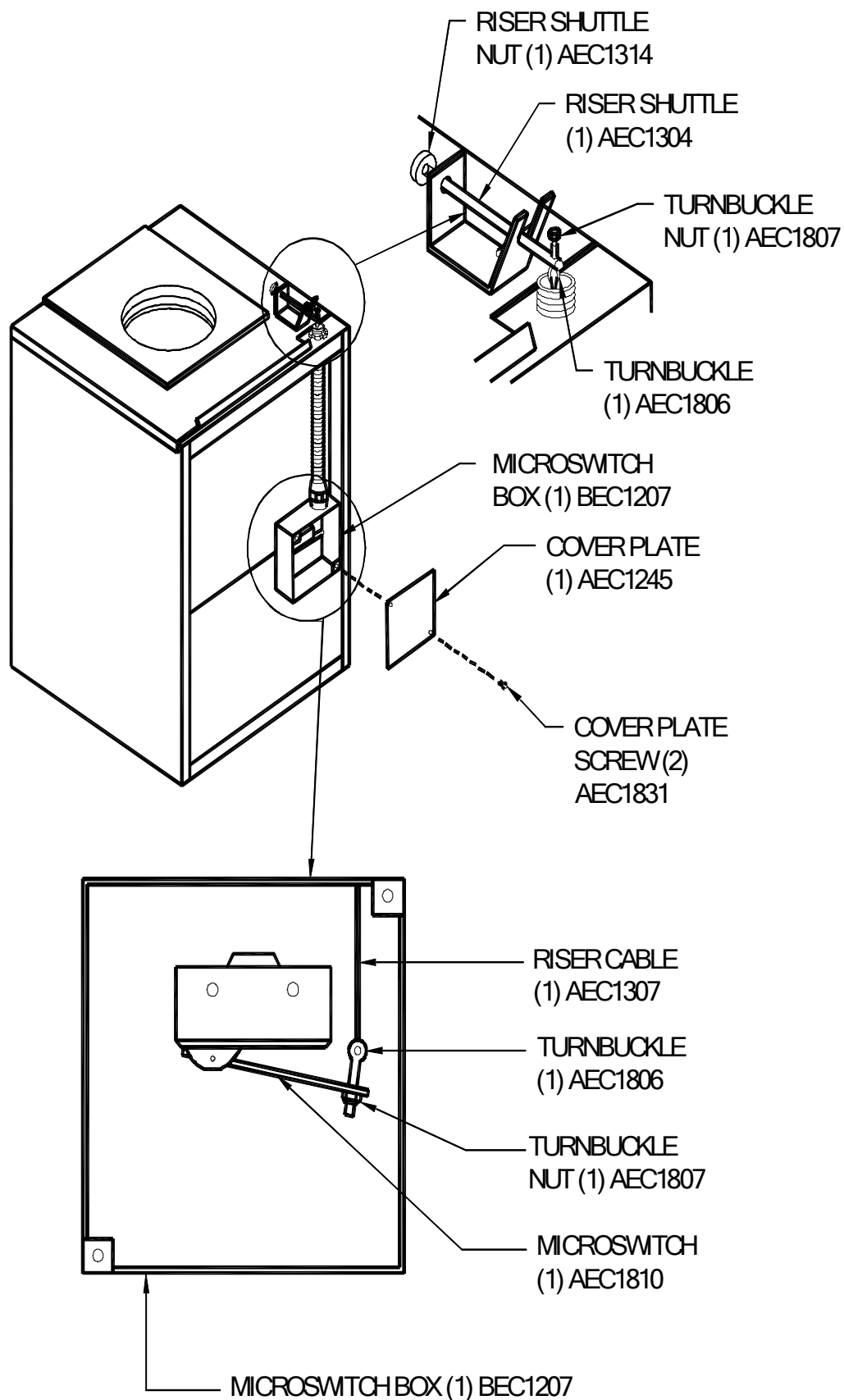
### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
1. Place the Top Assembly upside down.
  2. Remove the nut and lock washer from the Actuator Screw.  
***Note:** Older units may have a neoprene tube instead of a nut and lock washer. In this event, the neoprene tube is to be removed and discarded.*
  3. Unscrew the actuator screw from the left hinge pin.
  4. Remove the (2) rivets (top and bottom) from the left hinge pin.
    - a. Punch out the center of each rivet with a small drift pin.
    - b. Drill out each rivet.
    - c. Chisel off the rivet heads.
  5. Remove the hinge pin through the metal Lid. Set the hinge pin aside for reassembly later.
  6. Remove the Lid from the Top Assembly.  
***Note:** A rubber O-ring is located on each hinge between the metal Lid and the plastic Top. Set the O-rings aside for reassembly.*

## REPLACE LID

***Note:** Consult the SUITMATE® PARTS AND SUB-ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.*

1. Insert the right hinge pin into the Top and then insert the left hinge pin through the lid and into the Top.  
***Note:** Make certain that you have reinstalled the O-ring on both hinge pins.*
2. Rivet the left hinge pin to the Lid.
3. Screw in the new actuator screw and fasten with lock washer and nut. (See illustration.)  
***Note:** Make certain that with the lid open, the actuator screw does not touch the inside of the black plastic top.*





## REMOVE RISER CABLE ASSEMBLY

### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners
- Remove SUITMATE® from Wall Mounting
- Remove Top Assembly

1. Place the SUITMATE® in an upright position w
2. With the back of the unit facing out.
3. Remove the Microswitch Box cover. The cover is held on with (2) screws. Remove the cover and screws and set aside for reassembly.

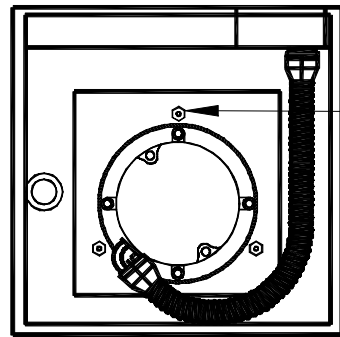
*Note: Older units may have rivets instead of screws.*

4. Unscrew the nut from the turnbuckle under the Microswitch arm. Set the nut aside for reassembly.
5. To disconnect the cable connection, remove the nut from the turnbuckle attached to the top of the Riser Cable and set it aside for reassembly.
6. Pull the turnbuckle down out of the hole in the riser shuttle.
7. Remove the Riser Cable by pulling it up through the conduit connector at the top of the unit.
8. Remove the Sub-Top Assembly (see page 20). Remove rivet debris and any other foreign objects from the liner.
9. Replace Sub-Top Assembly.

## REPLACE RISER CABLE ASSEMBLY

*Note: Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.*

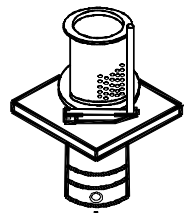
1. Place the SUITMATE® in an upright position with the back of the unit facing out.
2. Drop the new Riser Cable (with turnbuckle) down through the conduit to the Microswitch.
3. Insert the switch adjuster turnbuckle through the hole in the Microswitch arm. Replace the nut (saved from step 3 above) on the turnbuckle.
4. Insert the turnbuckle on the new Riser Cable through the hole in the shuttle slide pin. Replace the turnbuckle adjuster nut (saved in step 4 above).
5. Replace Top Assembly (see page 18).
6. Push the Lid down. The Microswitch should *NOT* activate (click) until the Lid is approximately ¼-inch from being totally depressed. Adjust the alignment by tightening (clockwise - will activate unit sooner) or loosening (counter-clockwise - will activate unit later) the turnbuckle on the bottom of the Riser Cable until the proper adjustment is obtained. Do not bend the Microswitch Arm. For further information refer to the MICROSWITCH ADJUSTMENT PROCEDURE section in this manual.
7. Provide power to the unit and, to make certain it is functioning properly, test it.
8. Disconnect power to the unit.
9. Replace the Microswitch Box cover securing it with the (2) screws (from step 2 in the "Remove..." section above).



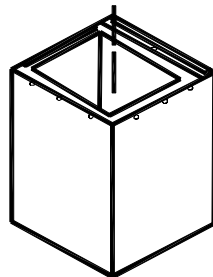
DRIVE UNIT ASSEMBLY MOUNTING  
CONSISTING OF (3) NUTS (AEC1224),  
AND (3) LOCK WASHERS (AEC1238)

BOTTOM VIEW OF  
SUITMATE

FRONT FACE

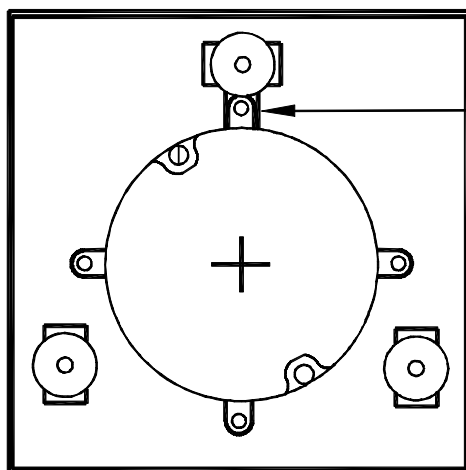


DRIVE UNIT ASSEMBLY (1) EC24



CASE ASSEMBLY (1) EC12

REMOVAL OF  
DRIVE UNIT



NOTE LOCATION OF ALUMINUM  
SPACER. IT IS REQUIRED TO KEEP  
THIS MOTOR MOUNT IN POSITION.

BOTTOM VIEW OF DRIVE UNIT

## REMOVE DRIVE UNIT ASSEMBLY

### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
1. Place the SUITMATE® on its face to expose the bottom of the unit.
  2. Unscrew the (2) captive screws that secure the Motor end cap from the bottom of the Motor.
  3. Remove the end cap with captive screws and set it aside for reassembly.
  4. Remove the Microswitch Box cover. The cover is held on with (2) screws. Remove cover and screws and set aside for reassembly.
  5. Disconnect the (3) wires connecting the motor to the unit by pulling the wire connectors from the L1 and L2 terminals on the Motor. Loosen the Green Grounding screw and disconnect the ground wire.
  6. Cut off the metal wire connectors from the wires to allow the wires to be pulled through the 90° conduit connector.
  7. Pull the wires through the 90° conduit connector by pulling them - from the Microswitch Box - about 2 to 3 inches.
  8. Remove the 90° conduit connector from the Motor by disconnecting the plastic cable conduit from the 90° conduit connector and unscrewing the 90° conduit connector from the Motor.
  9. Return the SUITMATE® to its upright position.
  10. Remove the three sets of Shock Mount nuts and lock washers from the base of the SUITMATE®. Set them aside for reassembly.
  11. From the top of the SUITMATE®, grasp the sides of the Basket. Remove the Drive Unit by lifting the Drive Unit up at a slight angle.

**Note:** *Be careful not to damage the black plastic liner.*

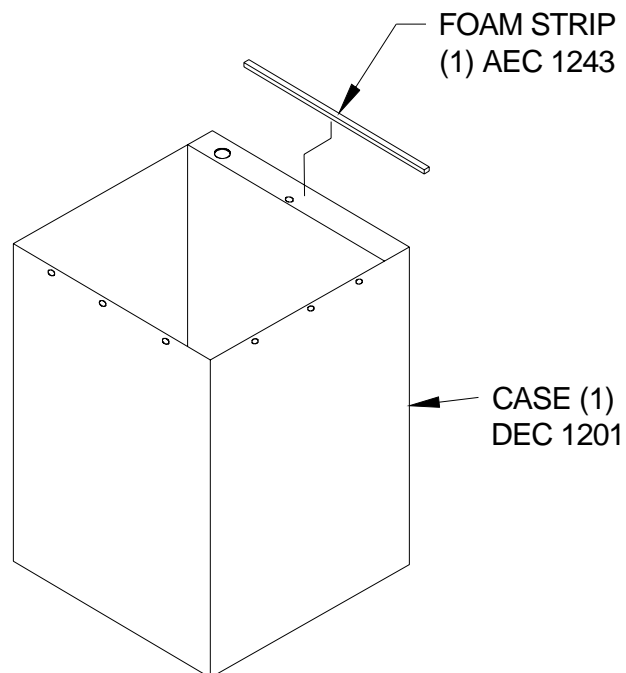
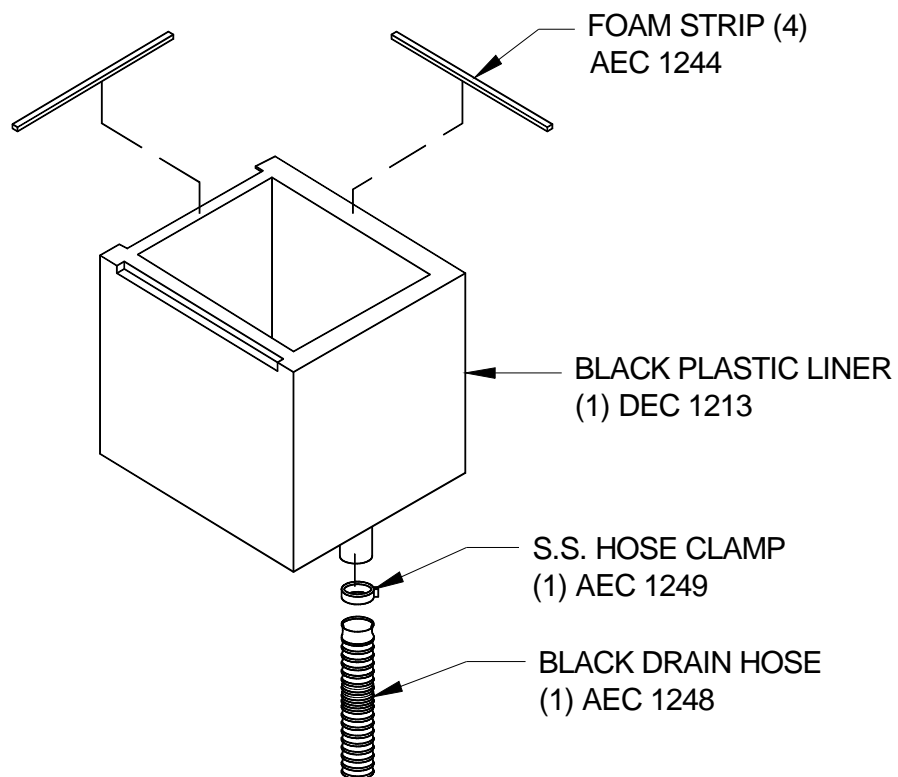
## REPLACE DRIVE UNIT ASSEMBLY

**Note:** *Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.*

1. Align the three Shock Mounts on the Drive Unit with the (3) holes in the Case and lower the Drive Unit into the Case making certain that the (3) Shock Mounts are in the appropriate holes in the Case, so that the 90° connector will be in the correct position.

**Note:** *Be careful not to damage the liner.*

2. Replace the (3) sets of Shock Mount nuts and lock washers on the Shock Mount threaded inserts that protrude through the Case.
  3. Replace the 90° conduit connector by screwing it into the Motor.
- Note:** *Be careful not to cross thread the threads on the 90° conduit connector.*
4. Push the (3) wires from the Microswitch Box up into the Motor.
  5. Reconnect the plastic cable conduit to the 90° conduit connector.
  6. Strip the (3) wires enough to install the-NEW-appropriate metal wire connectors on the wires.
  7. Reattach the (3) wire connectors to the appropriate terminals in the Motor: Green wire to green screw, white wire to terminal L2, and black wire to terminal L1.
  8. Replace the Motor end cap with the (2) captive screws (from step 2 in the "Remove" section above).



## REMOVE LINER

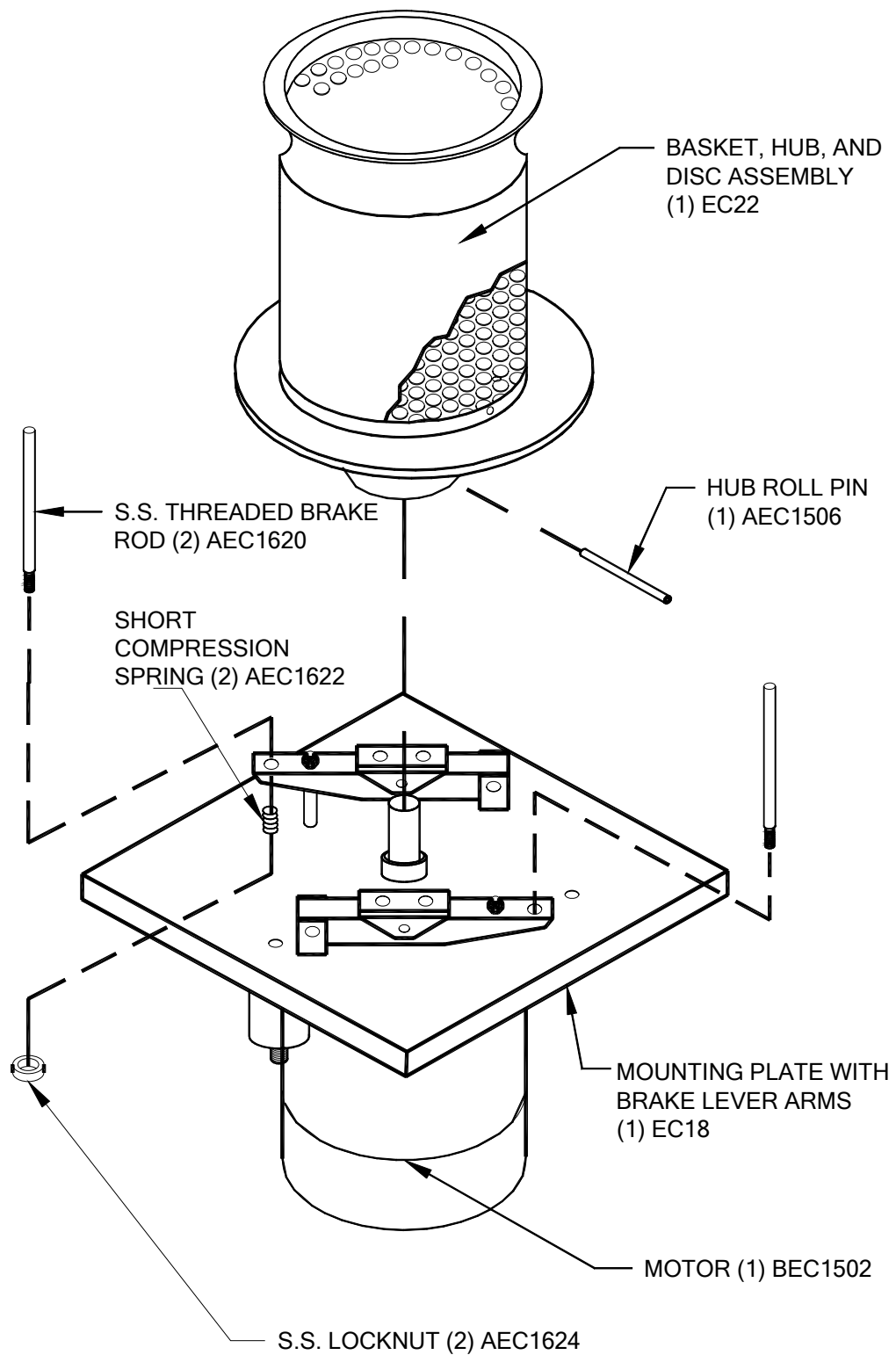
### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
  - Remove Drive Unit Assembly.
1. Place the SUITMATE® on its face to expose the bottom of the unit.
  2. Unscrew the hose clamp that holds the plastic drain tube to the Liner drain hose outlet.
  3. Remove the drain hose and set it aside for reassembly.
  4. Place the SUITMATE® unit in an upright position.
  5. From the top of the SUITMATE®, grasp the lip of the black plastic Liner and pull straight up. Be careful not to damage the Liner.

## REPLACE LINER

**Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.

Replace the Liner by reversing the above procedure.



## REMOVE BRAKE RODS, BASKET, HUB, AND BRAKE DISC ASSEMBLY

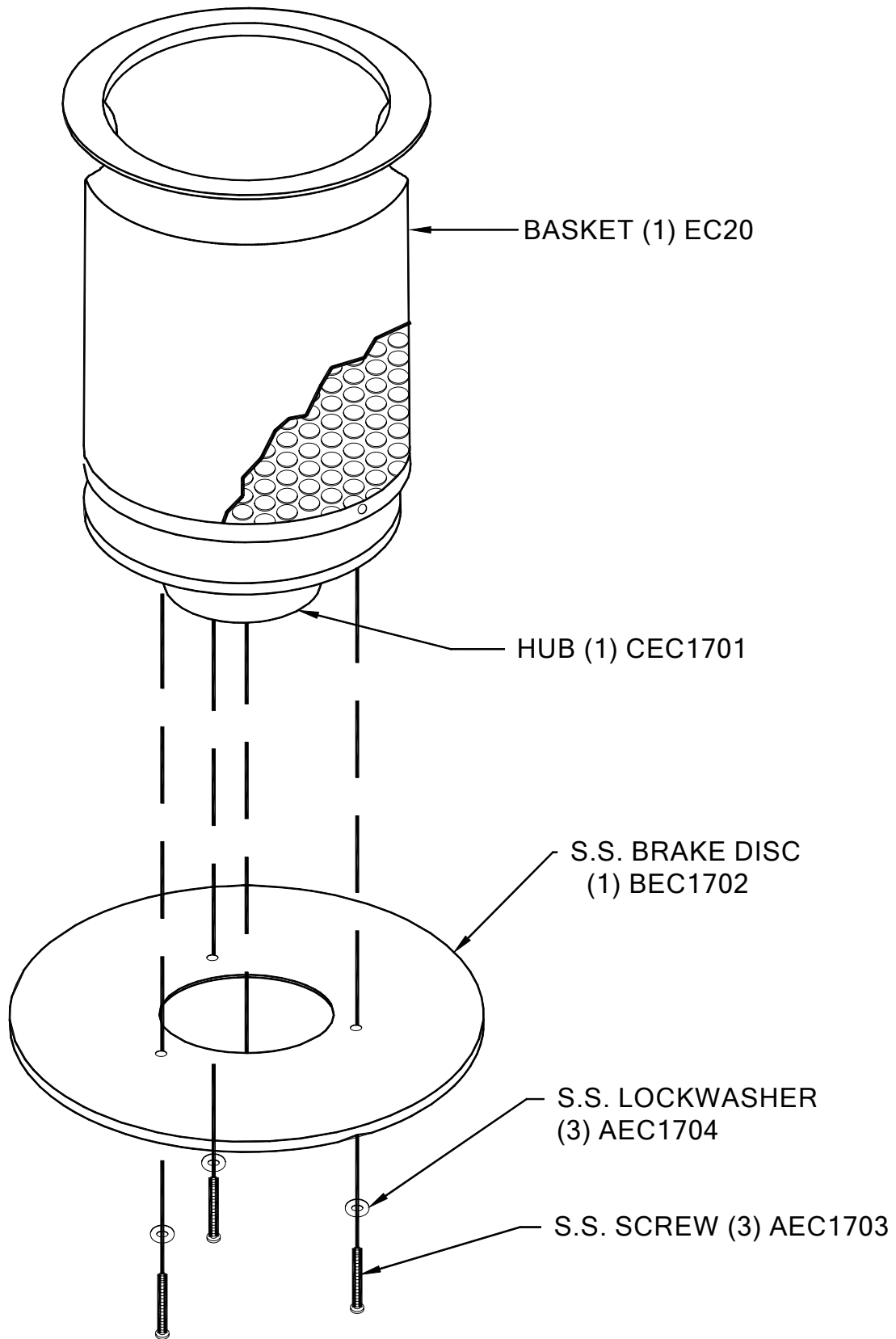
### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
  - Remove Drive Unit Assembly
1. Remove the Brake Rods from the Drive Unit Assembly by removing the locknut and spring on each Brake Rod. Set the Brake Rods, springs, and locknuts aside for reassembly.  
*Note: If Basket itself is damaged call Extractor Corporation at 800-553-3353.*
  2. Place a C-clamp over each Brake Lever and under the Motor Mounting Plate. Tighten the C-clamps to allow free rotation of the Basket and Motor shaft.  
*Note: Do not remove C-clamps!*
  3. Rotate the Motor Hub so that the hole for the spring pin that holds the Hub to the Motor shaft can be clearly seen.
  4. Use a hammer and a drift punch to remove the spring pin that holds the Hub to the Motor shaft. A new pin is required for reassembly (Part Number AEC1506).
  5. Using a small pry bar or large screwdriver, pry up on the Hub to free it from the Motor shaft. Rotate the Hub so that pressure is exerted evenly around the Hub and Motor shaft. Repeat until you can manually remove the Basket, Hub, and Disc Brake Assembly from the Motor's shaft. Be careful not to damage the Hub or the Motor Mounting Plate. If the Hub is "frozen" to the Motor shaft, please call Extractor Corporation at 800-553-3353 and explain your problem.  
*Note: The center hole of the Motor Hub must be round to prevent damage to the unit and excessive noise.*

## REPLACE BRAKE RODS, BASKET, HUB, AND BRAKE DISC ASSEMBLY

***Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.*

1. Drive a NEW spring pin (Part Number AEC1506) into the Motor Hub so that approximately 1/16-inch of the spring pin can be seen entering into the center hole for the Motor of the Motor Hub.
2. Align the hole and spring pin in the Hub with the key way of the Motor Shaft.
3. Push the Hub down on the Motor shaft until the hole in the spring pin and the Hub line up with the hole in the Motor shaft.  
*Note: It may be necessary to use a 2x4 piece of wood to tap the Hub down onto the Motor shaft.*
4. Drive the spring pin through the Motor shaft so the pin is flush with the Hub.
5. Remove the C-clamps.
6. Replace the Brake Rods onto the Drive Unit using springs and locknuts removed in step 1 above.





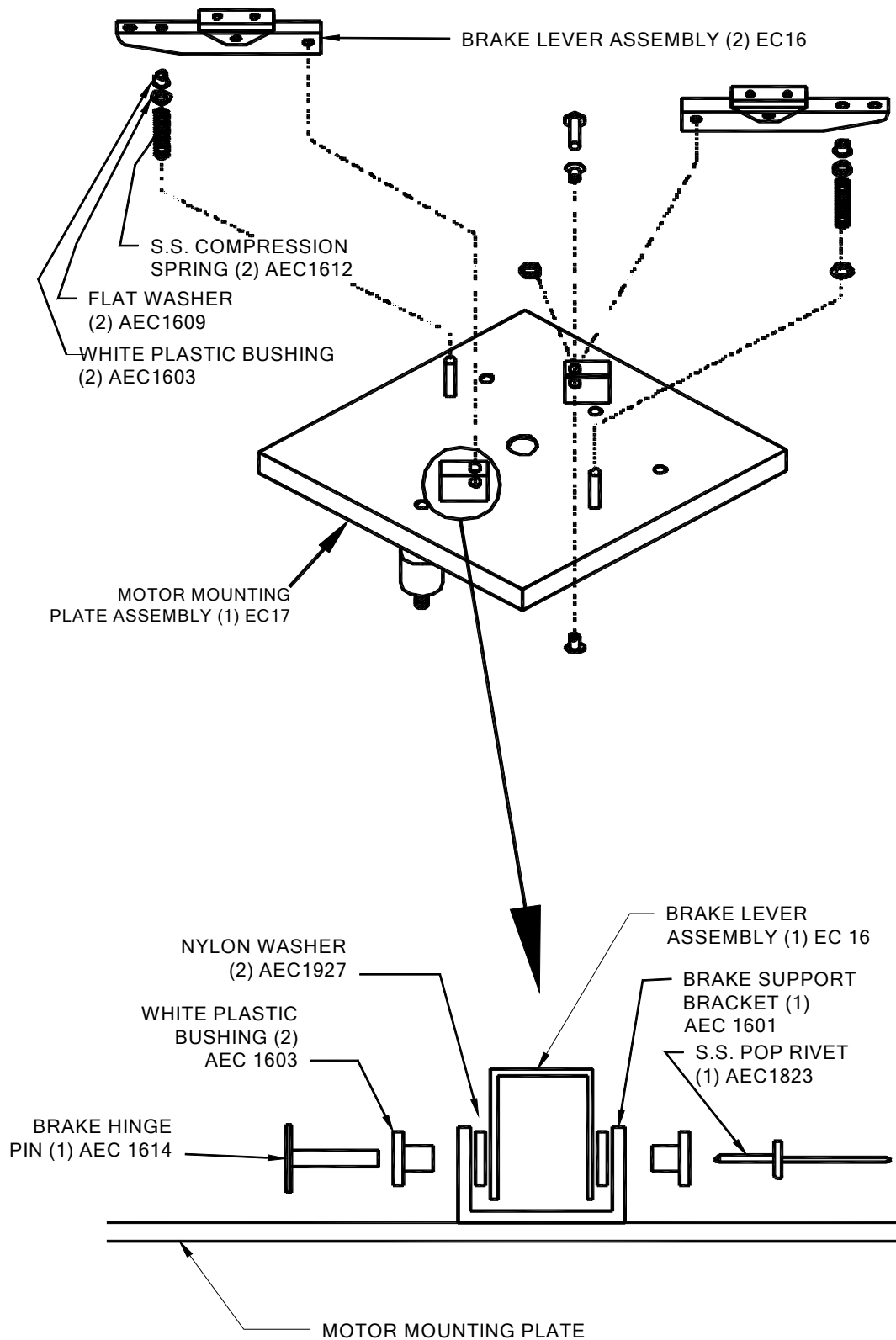
## REMOVE BRAKE DISC and BASKET

### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
  - Remove Drive Unit Assembly.
  - Remove Basket, Hub, and Brake Disc Assembly.
1. Remove the (3) screws and washers from the bottom of the Hub Assembly. Set them aside for reassembly.
  2. Remove the Brake plate from the Hub. The Brake Disc may have to be tapped off using a small plastic hammer. Replace if necessary.
- Note:** *The center hole in the Hub must be circular to prevent machine damage and excessive noise.*

## REPLACE BRAKE DISC and BASKET

Replace the Brake Disc by reversing the above procedure.



## REMOVE BRAKE LEVER

### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
- Remove SUITMATE® from Wall Mounting.
- Remove Top Assembly.
- Remove Sub-Top Assembly.
- Remove Drive Unit Assembly
- Remove Basket, Hub, and Brake Disc Assembly

**Note:** Make certain that the C-clamps have been removed from the Brake Levers.

1. Remove the Brake spring, washer, and plastic bushing. Set them aside for reassembly.  
**Note:** Pay attention to the location of the spring, washer and plastic bushing. It is recommended that the compression spring be replaced with a new compression spring.
2. Remove the rivet that holds the Brake Lever Assembly to the Brake support bracket on the Motor Mounting Plate.

- a. Punch out the center of each rivet with a small drift punch.
- b. Drill out the rivet.
- c. Chisel off the rivet head.

3. Remove and discard the Brake hinge pin.
4. Remove the old Brake Lever Assembly.

**Note:** Pay attention to the placement and alignment of the plastic bushings and plastic washers in the Brake Assembly. Set them aside for reassembly.

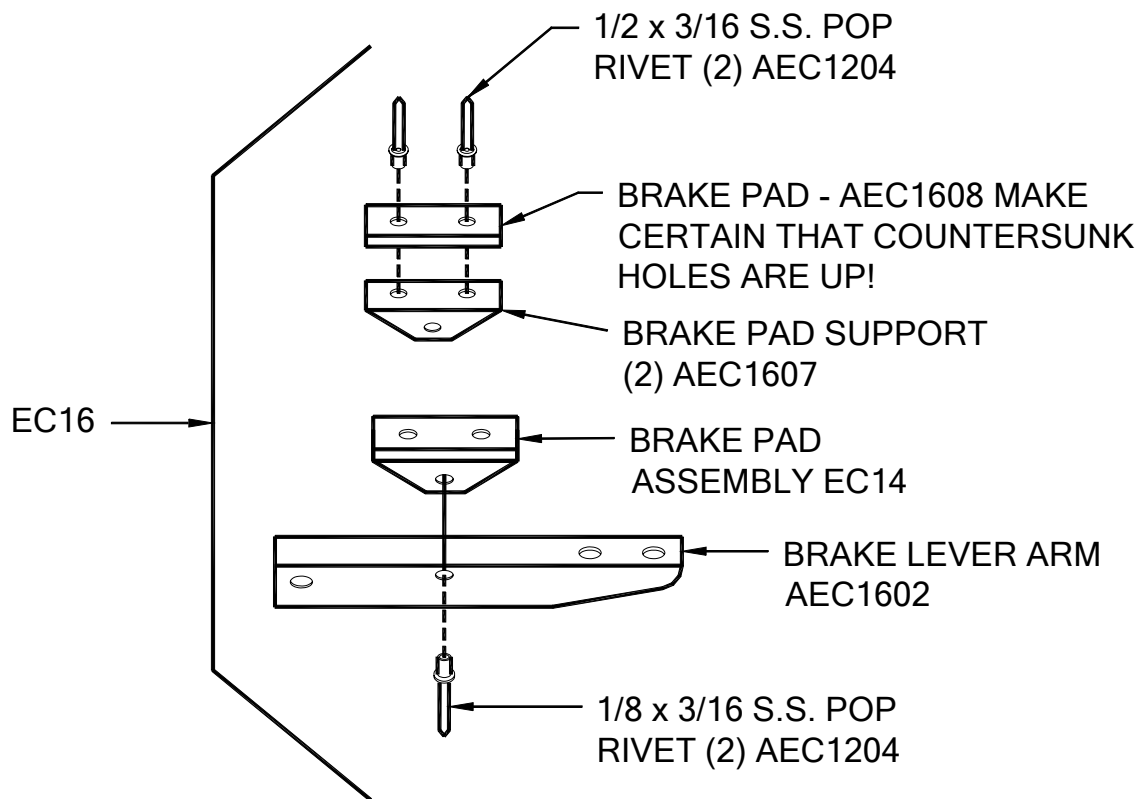
Inspect the Brake levers, springs and plastic bushings and washers for wear and replace with new ones if necessary.

## REPLACE BRAKE LEVER

**Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required..

Replace the Brake Lever by reversing the above procedure. A NEW hinge pin and pop rivet MUST be used.

**Note:** Be certain to have the plastic bushings and washers in their proper locations. Make certain to reinstall the C-clamps on the Brake Levers. The height of the Brake Pad should be less than 1 3/8 -inches high measured from the Motor Mounting Plate.



EC 16 BRAKE LEVER ASSEMBLY - 2 REQUIRED

## REMOVE BRAKE PAD

### *Do this FIRST*

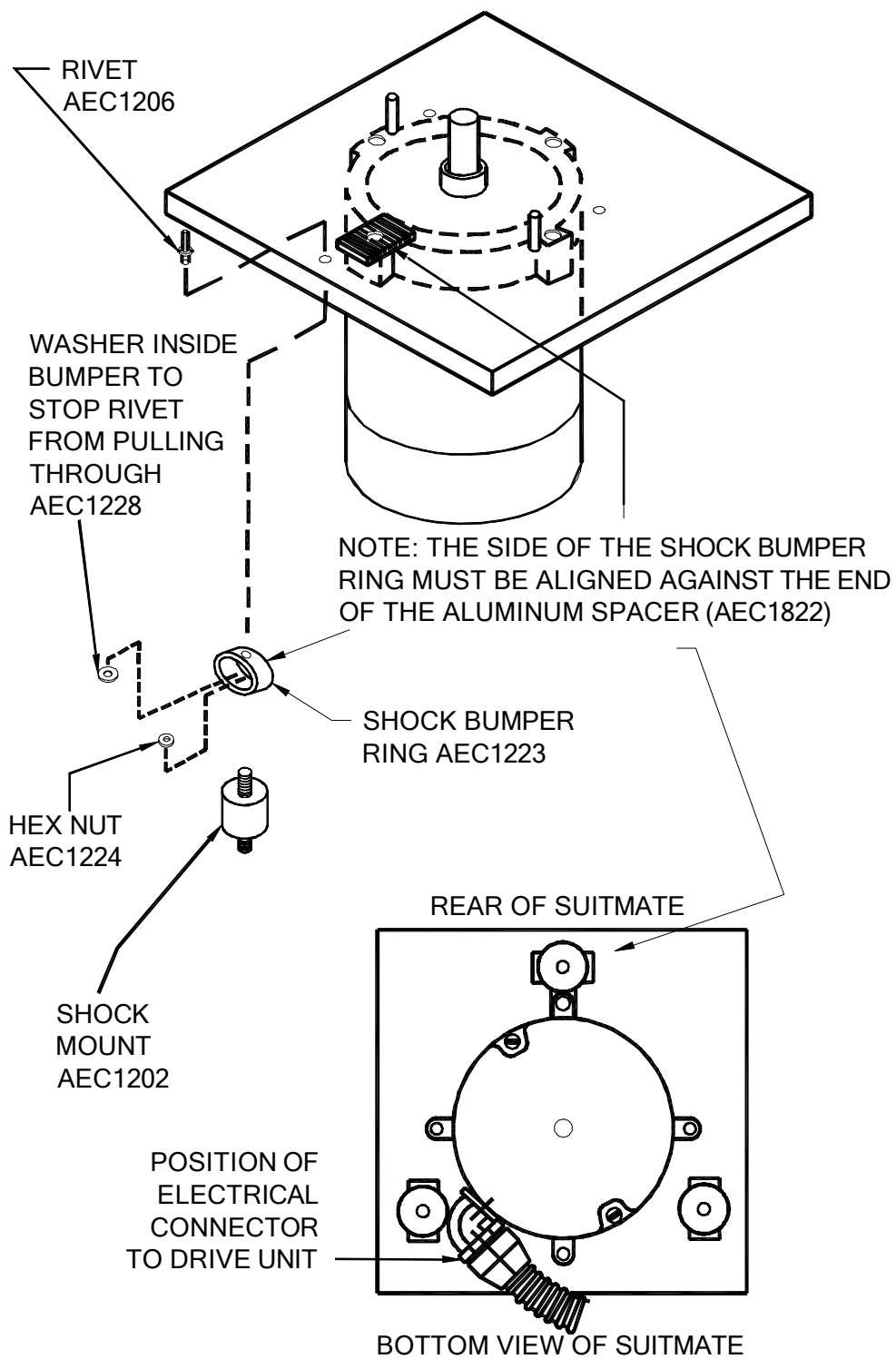
- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
  - Remove Drive Unit Assembly
  - Remove Basket, Hub, and Brake Disc Assembly
  - Remove Brake Lever
1. Remove the rivets that hold the Brake Pad support to the Brake Lever Assembly.
    - a. Punch out the center of each rivet with a small drift punch.
    - b. Drill out the rivet.
    - c. Chisel off the rivet head. Make certain the rivet is completely removed.
  2. Remove the Brake Pad Assembly.
  3. Remove the rivets that hold the Brake Pad to the Brake Pad support bracket.
    - a. Punch out the center of each rivet with a small drift punch.
    - b. Drill out the rivet.
  4. Remove the old Brake Pad.

## REPLACE BRAKE PAD

**Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.

1. Align the holes on the new Brake Pad with the holes of the Brake Pad support.

**Note:** Make certain the Brake Pad has the Countersunk holes on the top.
2. Rivet the Brake Pad to the Brake Pad support.
3. Align the holes on the side of the Brake Pad support with the holes in the side of the Brake Lever. The Brake Pad support should have a snug fit on the Brake Lever so that it does NOT move freely but can still be moved.
4. Rivet the Brake Pad to the Brake Lever.



## REMOVE SHOCK MOUNTS

### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
- Remove SUITMATE® from Wall Mounting.
- Remove Top Assembly.
- Remove Sub-Top Assembly.
- Remove Drive Unit Assembly

Remove the nut that secures the Shock Mount to the Shock Bumper Ring.

## REPLACE SHOCK MOUNTS

**Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.

Replace the nut to secure the new Shock Mount to the Shock Bumper Ring.

---

## REMOVE SHOCK BUMPER RINGS

### *Do this FIRST*

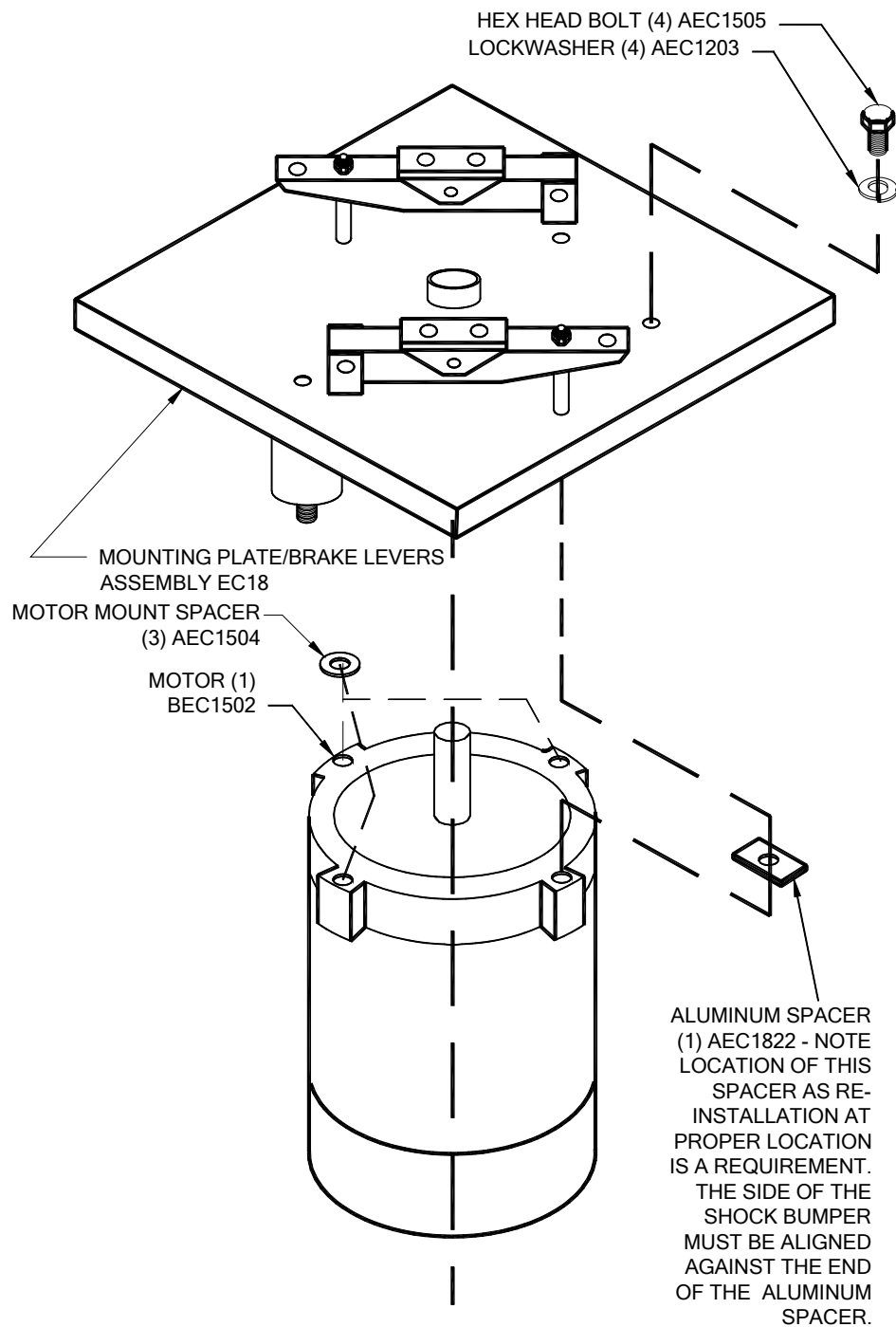
- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
  - Remove Drive Unit Assembly
  - Remove Basket, Hub, and Brake Disc Assembly
1. Remove the Shock Mount from the Shock Bumper Ring. Retain the shock mount and the hex nut for reassembly later.  
**Note:** Examine the positions of the 3 Shock Bumper Rings. Two Bumper Rings should be parallel to each other. The third should be perpendicular to the other two.
  2. Remove the rivet that holds the Shock Bumper Ring to the Motor Mounting Plate.
    - a. Punch out center of the rivet with a small drift punch.
    - b. Drill out the rivet.
    - c. Chisel off the rivet head. Make sure the rivet is completely removed.

**Note:** Set aside the small washer that helps to secure the Shock Bumper Ring to the Motor Mounting Plate.

## REPLACE SHOCK BUMPER RINGS

**Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required.

1. Rivet the Shock Bumper Ring to the Motor Mounting Plate.  
**Note:** Be certain to use the small washer to fasten the Shock Bumper Ring to the Motor Mounting Plate.  
*Make certain the Shock Bumper Ring Assembly is properly aligned with the other two Bumper Rings. Failure to do so will prevent proper reassembly of the SUITMATE®.*
2. Apply Silicone sealer on the rivet head and on top of the Motor mounting Plate.  
Use the nut (saved from step 1 in the "Remove Shock Mount..." section above) to attach the Shock Mount to the Shock Bumper Ring.





## REMOVE MOTOR FROM MOUNTING PLATE

### *Do this FIRST*

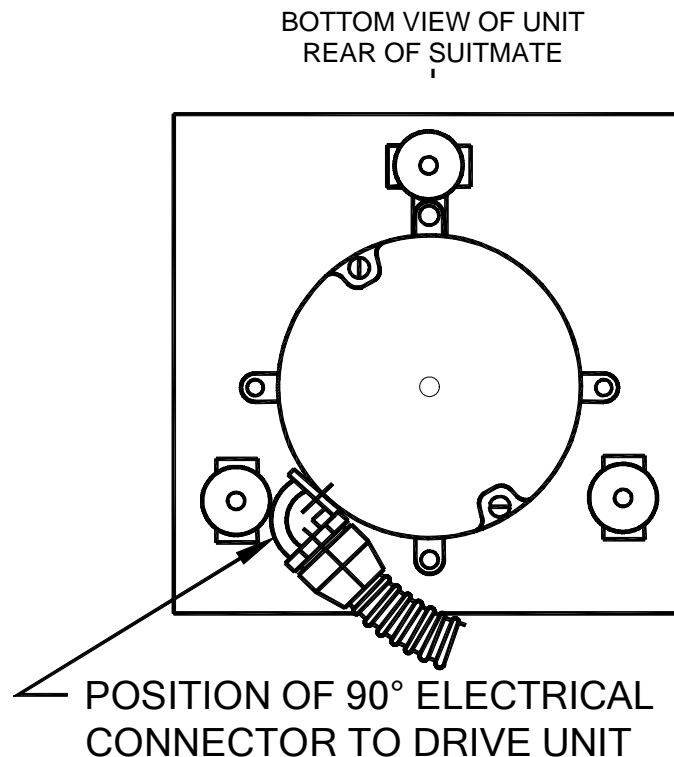
- Make certain you have all the necessary parts and fasteners.
  - Remove SUITMATE® from Wall Mounting.
  - Remove Top Assembly.
  - Remove Sub-Top Assembly.
  - Remove Drive Unit Assembly
  - Remove Basket, Hub, and Brake Disc Assembly
1. Remove the (4) bolts, lock washers, and spacers that hold the Motor to the Mounting Plate. Retain the hardware for reassembly later.  
***Note:** Examine the placement of the (4) spacers, especially the rectangular spacer next to the Shock Bumper Ring. The rectangular spacer prevents the Shock Bumper Ring from moving. Examine the location of the Motor for the 90° connector in relation to the three Shock Mounts. (Refer to drawing below).*
  2. Remove the Motor and set aside.

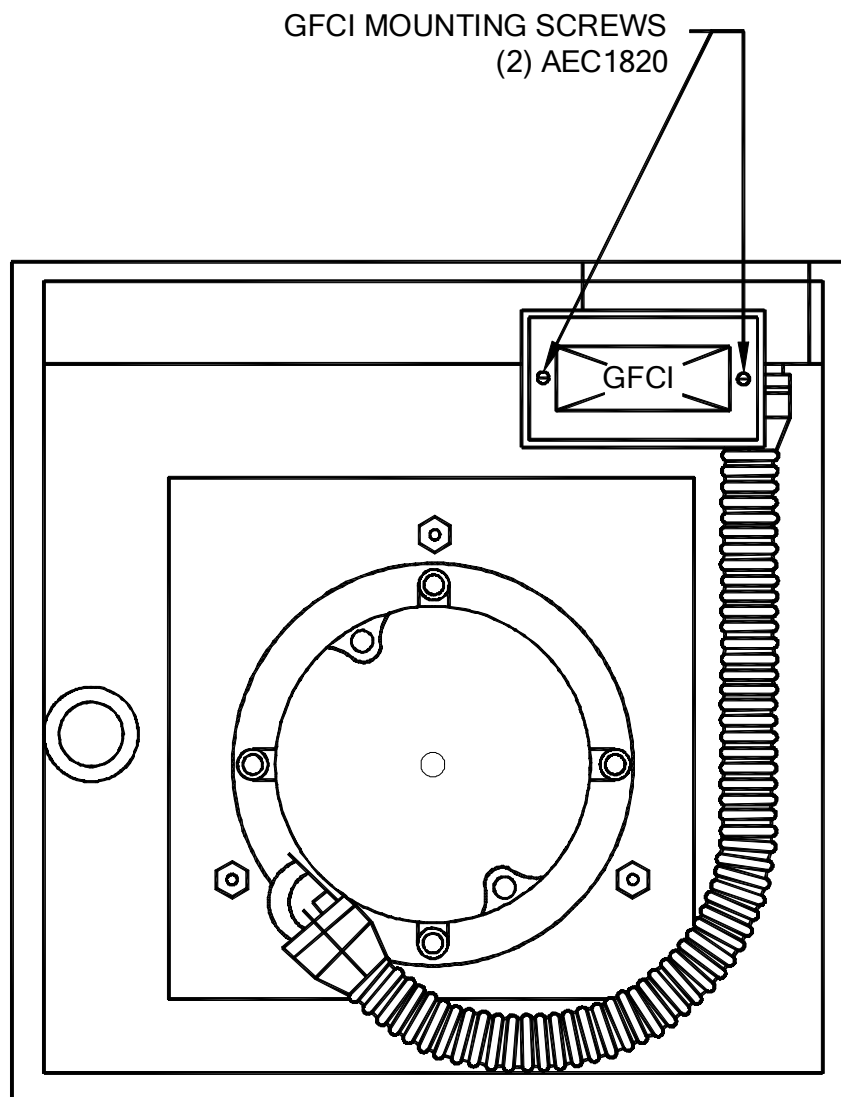
## REPLACE MOTOR

***Note:** Consult the SUITMATE® PARTS AND ASSEMBLIES SECTION in this manual to determine the exact parts and fasteners that will be required.*

Replace the motor by reversing the above procedure.

***Note:** When reassembling, use silicone sealer on the bolt and lock washer to preserve water tightness.*





BOTTOM VIEW OF SUITMATE

# ELECTRICAL ASSEMBLIES

## GENERAL

*When servicing the SUITMATE<sup>®</sup>, observe the following safety precautions:*

*Always turn off the power at the circuit breaker - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel - and disconnect the unit before doing any work on the SUITMATE<sup>®</sup>. Simply turning off a switch is NOT enough.*

*Use only proper tools, test equipment, and work practices when servicing the SUITMATE<sup>®</sup>. If there are any questions concerning proper tools, equipment or practices, please call the factory for recommendations at (800) 553-3353.*

*Due to critical tolerances, use only specified replacement parts. See the SUITMATE<sup>®</sup> PARTS AND ASSEMBLIES section of this manual.*

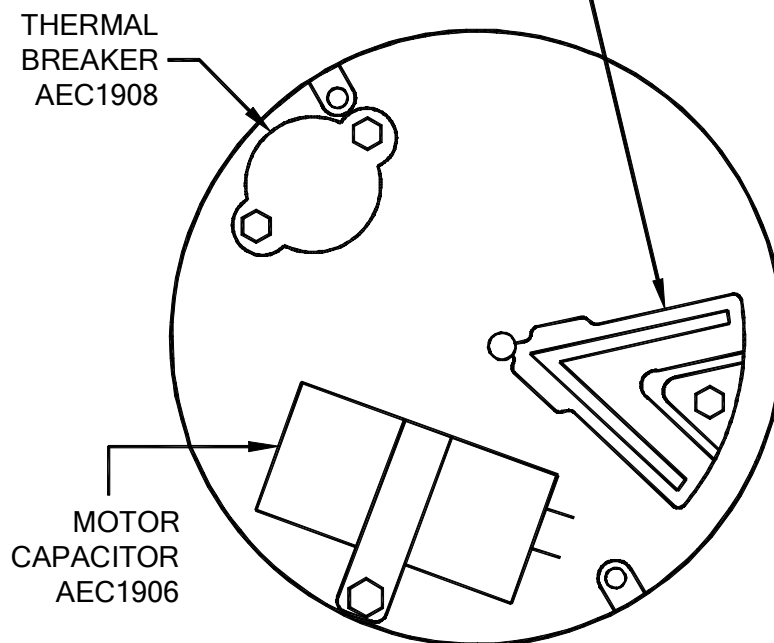
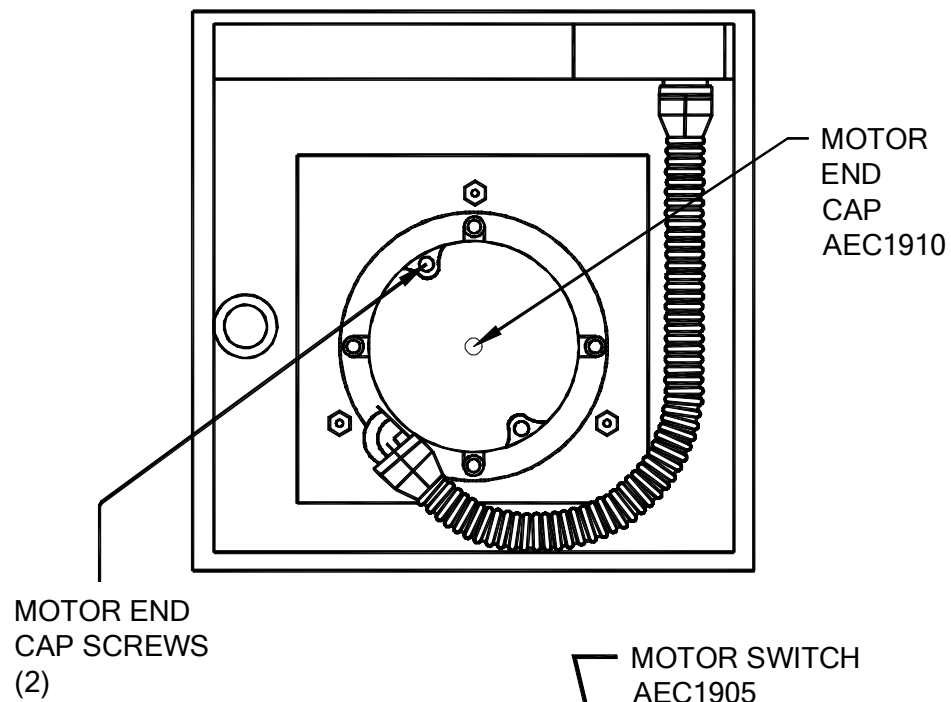
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## REPLACE GFCI

The GFCI can be serviced from the bottom of the unit without removing the unit from the wall.

### ***Do this FIRST***

- Make certain you have all the necessary parts and fasteners.
  - Consult the SUITMATE<sup>®</sup> PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required for each procedure.
1. Make certain power to the unit is turned off - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel.
  2. Remove the cover of the weatherproof Junction Box that contains the GFCI. Set the cover and screws aside for reassembly.
  3. Remove the (2) screws attaching the GFCI to the Junction Box. Set the screws aside for reassembly.
  4. Pull the GFCI out of the weatherproof Junction Box.
  5. Remove the wires, one at a time, and put each wire in the matching position on the new GFCI.
  6. Place the newly wired GFCI into the weatherproof Junction Box and secure it using the screws removed in number 3 above.
  7. Replace the cover of the weatherproof Junction Box using the (2) screws previously removed.



LOCATION OF MOTOR COMPONENTS  
(WITH MOTOR END CAP REMOVED)

## REMOVE AND REPLACE MOTOR CAPACITOR

The Motor Capacitor can be serviced from the bottom of the unit without removing the unit from the wall.

### ***Do This FIRST***

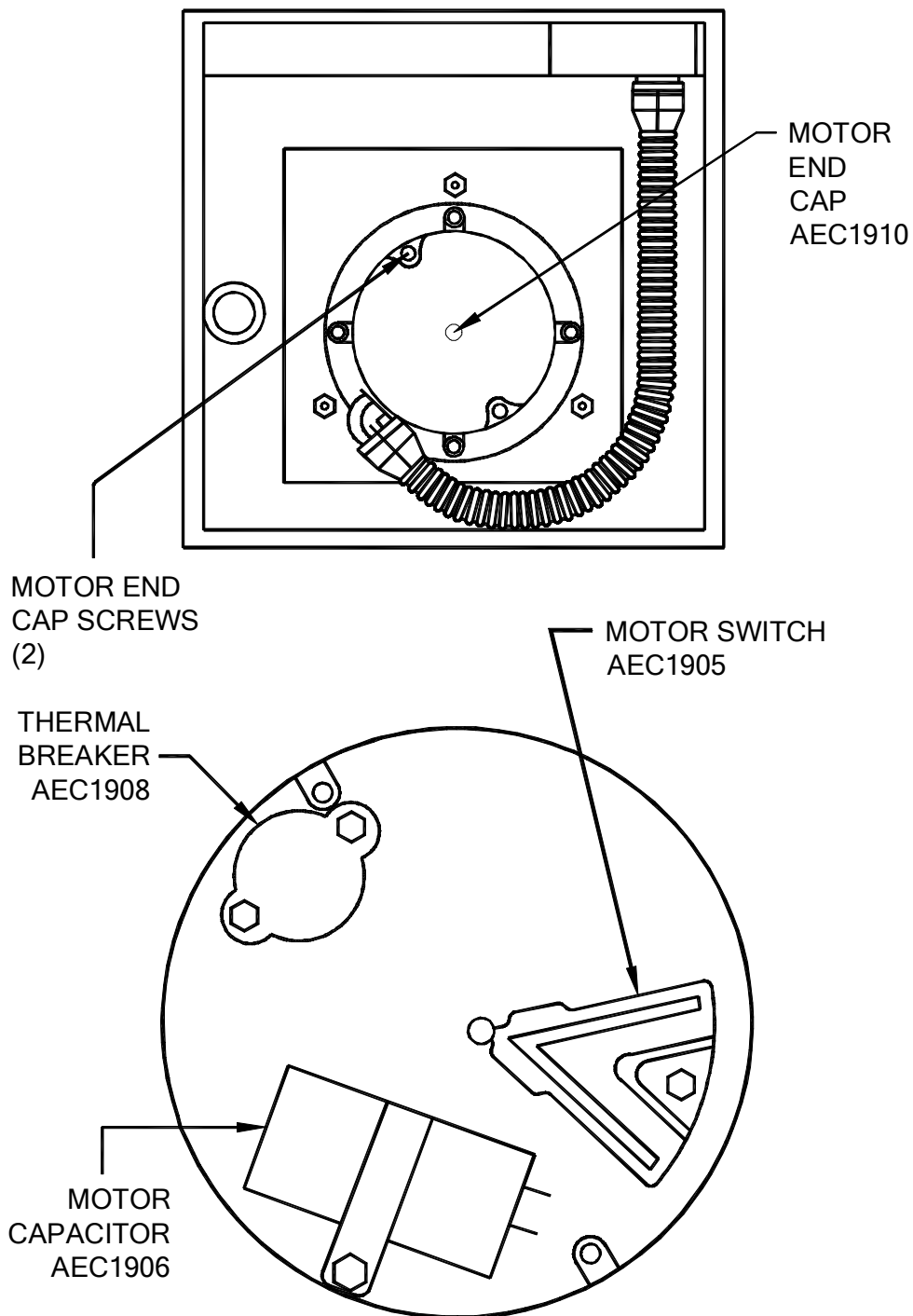
- Make certain you have all the necessary parts and fasteners.
  - Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required for each procedure.
1. Make certain power to the unit is turned off - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel.
  2. Remove the Motor end cap by loosening the (2) captive screws and setting the end cap aside.
  3. Remove the screw on the Motor's post that holds the Capacitor retaining piece and the plastic shield. Set the pieces of the shield aside for reassembly.  
***Note:** Carefully note the position and location of the old Capacitor as the new Capacitor MUST be installed in the same position and location as the old one.*
  4. Remove the wires, one at a time, from the old Capacitor and put each wire in the matching position on the new Capacitor.
  5. Remove the old Capacitor and position the newly wired Capacitor in the Motor end using the previously removed plastic shield and retaining piece. Replace and tighten the screw on the Motor post.
  6. Replace the previously removed Motor end cap.
- 

## REMOVE AND REPLACE THERMAL BREAKER

The Thermal Breaker can be serviced from the bottom of the unit without removing the unit from the wall

### ***Do this FIRST***

- Make certain you have all the necessary parts and fasteners.
  - Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required for each procedure.
1. Make certain power to the unit is turned off - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel.
  2. Remove the Motor end cap by loosening the (2) captive screws and setting the end cap aside.
  3. Remove the hex head screws holding the Thermal Breaker in place. Set them aside for reassembly later.  
***Note:** Carefully note the position and location of the old Thermal Breaker as the new Thermal Breaker MUST be installed in the same position and location as the old one.*
  4. Remove the wires, one at a time, from the Motor and replace them with the same color wires from the new Thermal Breaker. Note color and which post it is connected to.
  5. Replace the old Thermal Breaker with the newly connected Thermal Breaker.
  6. Position the Thermal Breaker in the Motor and replace and tighten the hex head screws previously removed.
  7. Replace the previously removed Motor end cap.



LOCATION OF MOTOR COMPONENTS  
(WITH MOTOR END CAP REMOVED)

## REMOVE AND REPLACE MOTOR SWITCH

The Motor Switch can be serviced from the bottom of the unit without removing the unit from the wall.

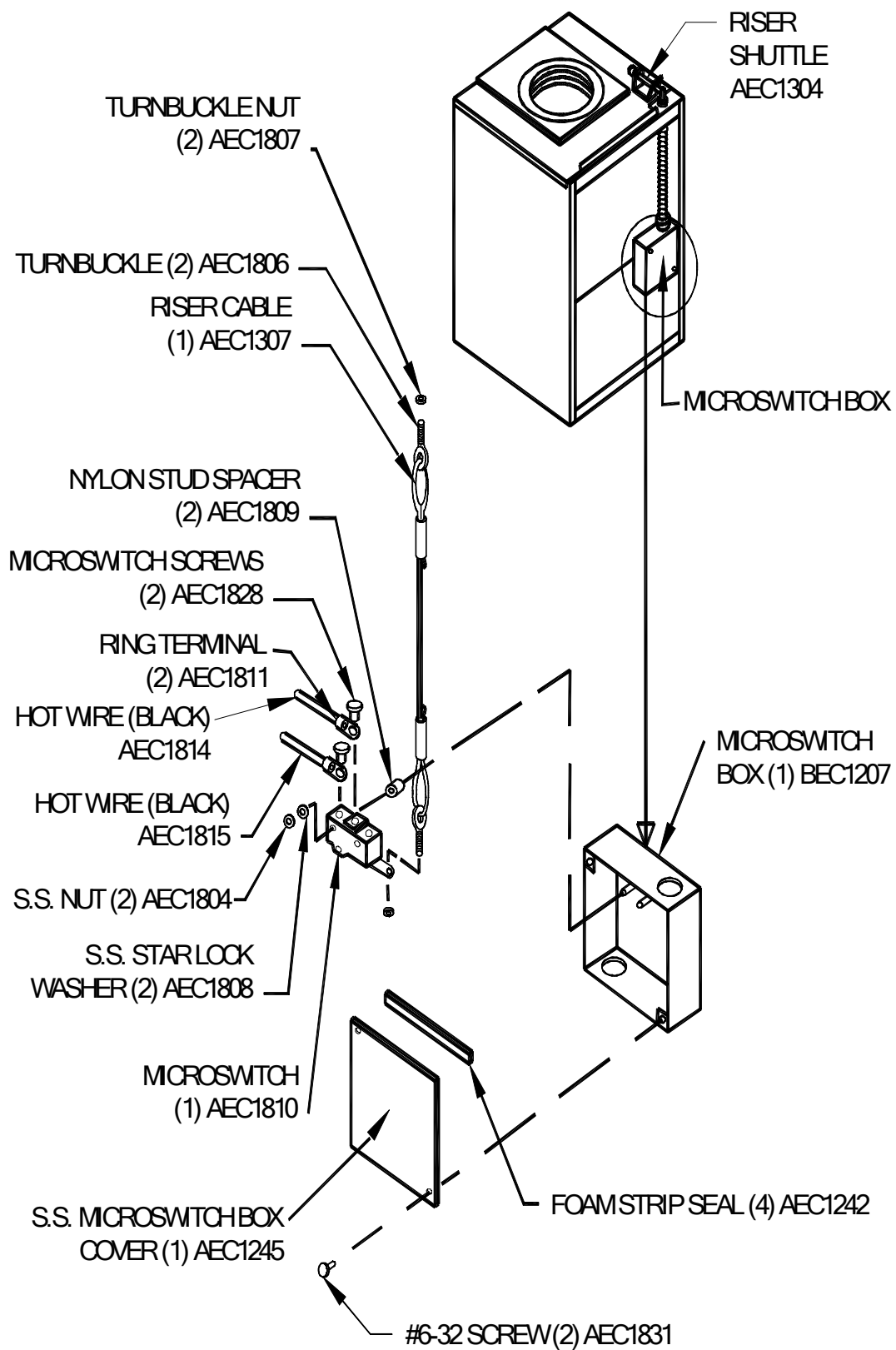
### ***Do This FIRST***

- Make certain you have all the necessary parts and fasteners.
- Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required for each procedure.

1. Make certain power to the unit is turned off - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel.
2. Remove the Motor end cap by loosening the (2) captive screws and setting the end cap aside.
3. Remove the hex head screw holding the Motor Switch in place. Set it aside for reassembly.

***Note:*** Carefully note the position and location of the old Motor Switch, as the new Motor Switch must be installed in the same position and location as the old one.

4. Remove the wires, one at a time, from the Motor Switch. Put each wire in the matching position on the new Switch.
5. Replace the old Motor Switch with the newly connected Motor Switch. Position the Motor Switch in the Motor and replace and tighten the hex head screw previously removed.
6. Replace the previously removed Motor end cap.





## REMOVE AND REPLACE MICROSWITCH

### *Do this FIRST*

- Make certain you have all the necessary parts and fasteners.
- Consult the SUITMATE® PARTS AND ASSEMBLIES section in this manual to determine the exact parts and fasteners that will be required for each procedure.
- Remove SUITMATE® from Wall Mounting.

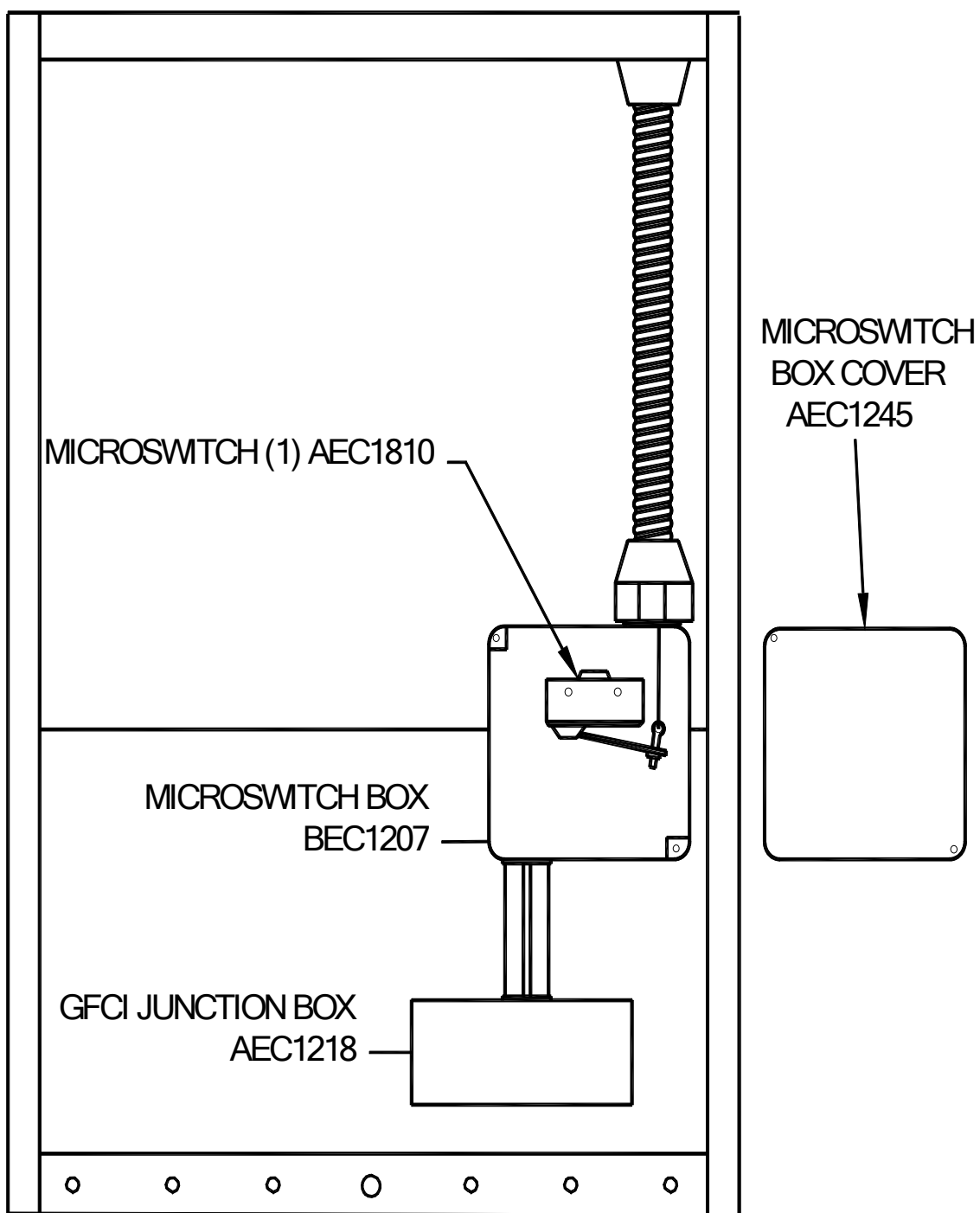
1. Place the SUITMATE® on its front side.
2. Remove the Microswitch Box cover to expose the Microswitch and Riser Cable lower assembly by unscrewing (2) screws. Place the screws aside for reassembly later.  
*Note: Older units may have rivets instead of screws.*
3. Unscrew the nut on the Riser Cable turnbuckle to free the Microswitch's arm. Set the nut aside for reassembly.
4. Remove the nuts and washers to access the Microswitch. Set the hardware aside for reassembly.
5. Remove the Microswitch from the mounting studs.
6. Remove the wires, one at a time, and put each wire in the matching position on the new Microswitch.
7. Place the newly wired Microswitch on the mounting studs. Make certain the switch arm extends to the right. Use the nuts and washers previously removed to secure the new Microswitch.

*Note: Do not over tighten the nuts!*

8. Put the threaded end of the Riser Cable turnbuckle through the hole in the arm of the Microswitch. Use the previously removed nut (step 3) to secure the turnbuckle to the switch arm.
9. Refer to the SUITMATE® MICROSWITCH ADJUSTMENT PROCEDURE in this manual to properly adjust the Microswitch.
10. After the Riser Cable is properly adjusted, replace the Microswitch Box cover and secure it in place using the previously removed screws.

### **WARNING!**

*Make certain the foam seal on the Microswitch Box cover is not damaged so that water cannot enter.*



REAR OF SUITMATE (SHOWN WITH COVER  
REMOVED FROM MICROSWITCH BOX)

## MICROSWITCH ADJUSTMENT PROCEDURE

Depress the Lid on the top of the unit and listen for the faint click (activating) of the Microswitch. If the Microswitch does not activate or if it activates before the Lid is ¼-inch from being fully depressed, there is probably a problem with the alignment of the Microswitch. The following procedure will solve the alignment problem. Please consult the illustration (found on the opposite page) showing the back of the SUITMATE® unit to identify the parts that you will need to recognize.

### REMOVE SUITMATE FROM WALL MOUNTING

1. Turn off the main electrical power to the unit - place a lockout tag on the circuit breaker panel indicating that the breaker is not to be turned on except by authorized personnel - and disconnect the unit before doing any work on the SUITMATE®. Simply turning off a switch is *NOT* enough.

<b>CAUTION</b>
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*Make certain the main electrical power to the unit is turned off - and locked out - before beginning work on the SUITMATE®.*

2. If the SUITMATE® was installed with hard plumbing (P-trap), disconnect the waste outlet from the unit.
3. Remove the cover of the weatherproof Junction Box that contains the GFCI; remove the GFCI mounting screws; disconnect the ground wire. Leave the GFCI fastened to the unit. Retain the weatherproof Junction Box cover and mounting screws, and the GFCI mounting screws, for reinstallation.
4. Disconnect the power feed liquid tight raceway from the Junction Box.
5. Remove the lower fasteners anchoring the unit to the wall.
6. Remove the SUITMATE® from the Mounting Bracket by firmly grasping the sides of the Case bottom and gently lifting straight up until the unit clears the upper back lip of the Mounting Bracket. Take the unit to a workbench.

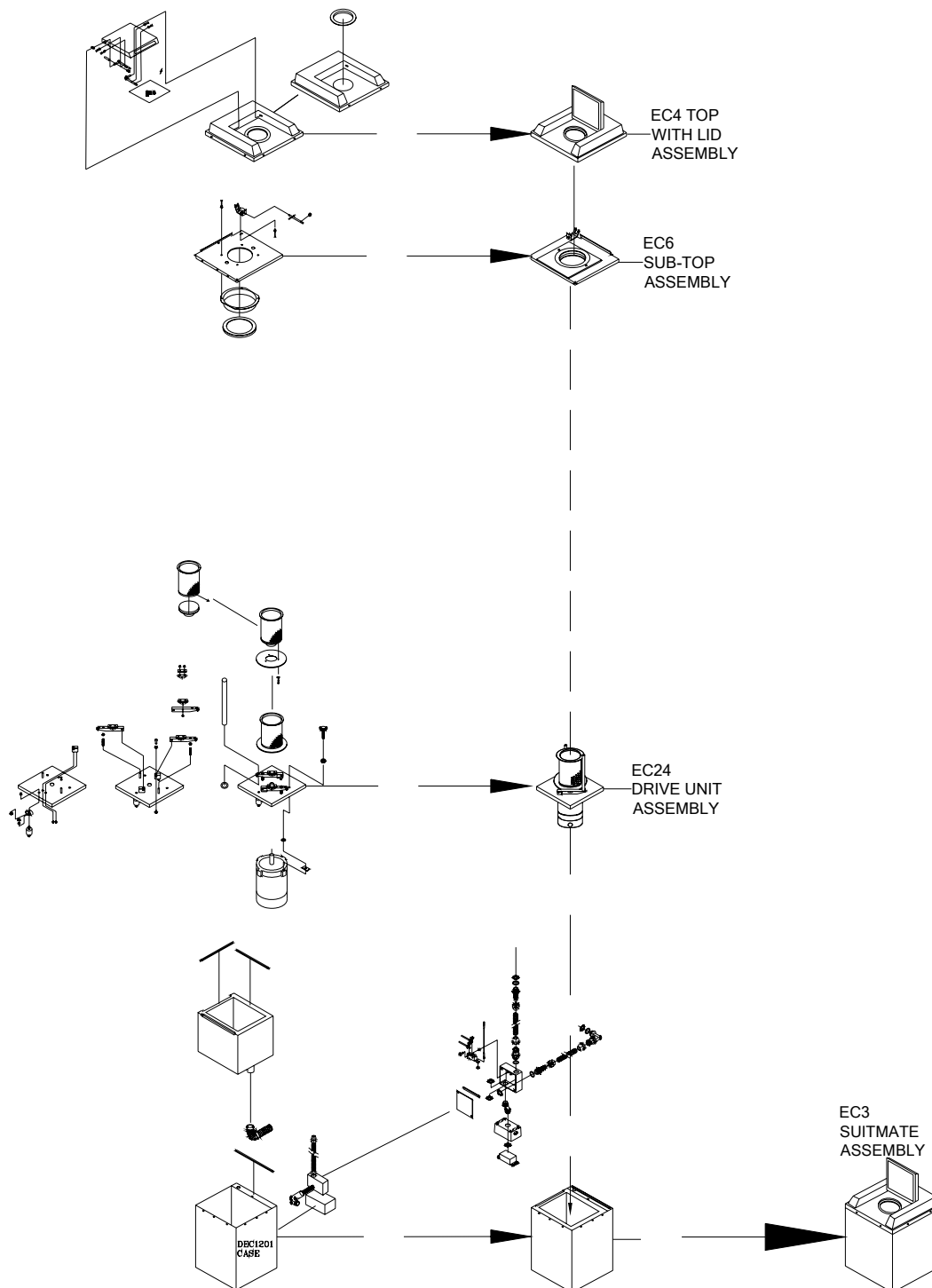
### CHECKING MICROSWITCH ALIGNMENT

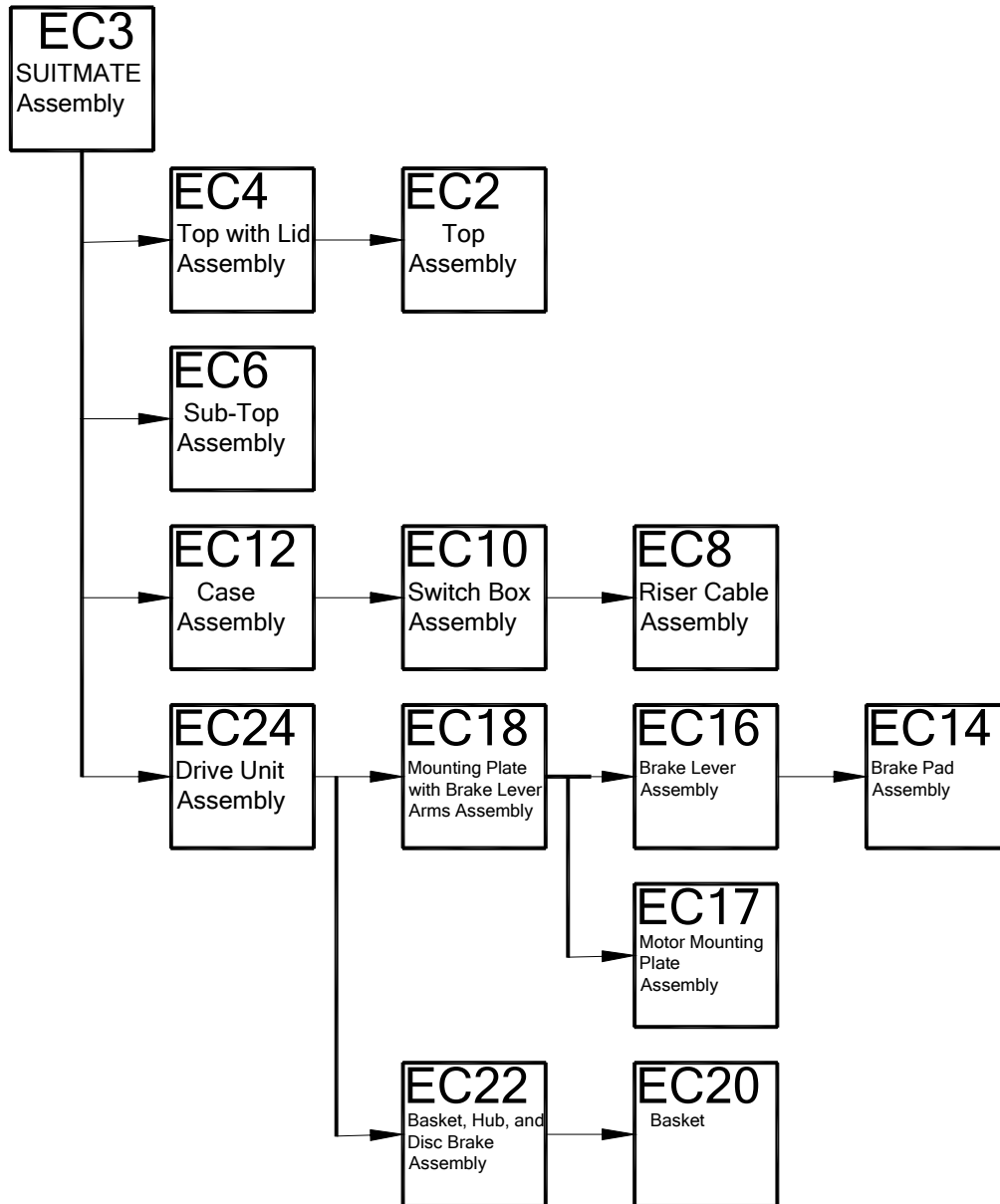
1. Locate the Microswitch Box.
2. Remove the Microswitch Box cover by unscrewing (2) screws. Set the cover and (2) screws aside for reassembly.  
*Note: Older units may have rivets instead of screws.*
3. With the cover removed the Microswitch is revealed. Push the Lid down on the top of the unit to determine if the Riser Cable that runs from the top of the unit to the Microswitch arm is pulling on the arm. If there is no movement the actuator screw in the top may be broken. Please call the Extractor Corporation at 800-553-3353 and explain your problem.
4. If the Cable does pull up on the Microswitch arm, then the alignment can be adjusted. First, push the Lid down; the Microswitch should NOT activate (click) until the Lid is approximately ¼-inch from being totally depressed. Adjust the alignment by tightening (clockwise will activate unit sooner) or loosening (counter-clockwise will activate later) the turnbuckle on the bottom of the Riser Cable until the proper adjustment is obtained. Provide power to the unit and, to make certain that it is functioning properly, test it.
5. Disconnect the power to the unit.
6. Replace the Microswitch Box cover using the (2) screws removed in step 2.

### REPLACE THE SUITMATE®

Return the SUITMATE® unit to its proper location and reconnect the unit by reversing the above procedure.

If you have further difficulties or want additional information, please call Extractor Corporation at 800-553-3353.





# SUITEMATE<sup>®</sup> PARTS and ASSEMBLIES

## Parts Required Per SUITEMATE<sup>®</sup>

PART NUMBER	DESCRIPTION	QUANTITY
<b>EC2</b>	<b>TOP ASSEMBLY</b>	<b>1</b>
CEC1401	Black Plastic Top (Comes With EC2)	1
AEC1406	S.S. Trim Ring (Comes With EC2)	1
<b>EC4</b>	<b>TOP ASSEMBLY WITH LID</b>	<b>1</b>
EC2	Top Assembly	1
CEC1402	S.S. Lid	1
AEC1354	Rubber Lid Bumper	2
BEC1403	S.S. Hinge Pin - Left	1
BEC1404	S.S. Hinge Pin - Right	1
AEC1410	1/8 x 3/8 S.S Rivet	4
AEC1416	Black O-Ring - Separates Lid From Top	2
AEC1405	Actuator Screw - In Left Hinge Pin	1
AEC1804	S. S. Stud Nut	1
AEC1704	Lock Washer	1
AEC1237	Lid Operating Instructions	1
AEC1235	Lift Lid Label (Comes With AEC1237)	1
AEC1205	Black Aluminum Rivet - Secures Top To Case	6
<b>EC6</b>	<b>SUB-TOP ASSEMBLY</b>	<b>1</b>
CEC1301	S.S. Sub Top	1
BEC1303	S.S. Riser Bracket	1
AEC1305	Teflon Tape - Covers Bracket Surface (Comes With BEC1303)	1
AEC1204	S.S. Rivet 1/8 X 3/8 - Secures Riser Bracket to Sub - Top	2
AEC1304	S.S. Riser Shuttle	1
AEC1314	Riser Shuttle Nut	1
AEC1418	Shuttle Slide Pin - Roll pin in Riser Shuttle	1
AEC1417	S.S. E-Ring - Secures Shuttle in Bracket	1
AEC1824	Sub - Top Retainer Ring	1
ARE1204	S.S. Rivet 1/8 X 3/16 - Secures Retainer Ring To Sub-Top	4
AEC1352	Sub - Top Gasket -- Covers Front Top Portion of Sub - Top	1
AEC1240	Aluminum Rivet 3/16 X 1/8 - Secures Sub-Top Assembly to Case	3
<b>EC8</b>	<b>RISER CABLE ASSEMBLY</b>	<b>1</b>
AEC1307	Riser Cable - Note: AEC1307, 1308, and 1806 sold only as assembly	1
AEC1308	Cable Sleeve	2
AEC1806	Switch Adjuster Turnbuckle - Secures both ends of Riser Cable	2
AEC1807	Switch Adjuster Nut	2
<b>EC10</b>	<b>SWITCH BOX ASSEMBLY</b>	<b>1</b>
EC8	Riser Cable Assembly	1
BEC1207	S. S. Microswitch Box	1
AEC1245	S. S. Microswitch Box Cover	1

Parts Required Per SUITMATE®

PART NUMBER	DESCRIPTION	QUANTITY
	<b>SWITCH BOX ASSEMBLY - continued</b>	
AEC1242	Foam Strip Seal - On Microswitch Box Cover	4
AEC1810	Microswitch	1
AEC1809	Nylon Stud Spacer - Separates Microswitch from Box	2
AEC1808	S. S. Star Washer (6/32) - Secures Microswitch Box	2
AEC1804	S. S. Stud Nut (6/32) - Secures Microswitch to Box	2
AEC1356	Cable Conduit, Plastic - Switch Box	1
AEC1358	Conduit Connector, Plastic - Connect Conduit/Switch Box	1
AEC1214	Conduit Lock Nut - Secures Connector to Switch Box	1
ARE1814	Hot Wire, Black - Microswitch to Motor	1
AEC1815	Hot Wire, Black - Microswitch to GFCI	1
AEC1811	Ring Terminal - Secures Hot Wires to Microswitch	2
AEC1828	Microswitch Screw - Secures Hot Wires to Microswitch	2
AEC1830	Microswitch Lock Washer - Secures Hot Wires to Microswitch (Comes With AEC1828)	2
AEC1831	6-32 x 3/8 Screw - secures Cover to Box	2
<b>EC12</b>	<b>CASE ASSEMBLY</b>	<b>1</b>
EC10	Switch Box Assembly	1
DEC1201	S. S. Case	1
DEC1213	Black Plastic Liner	1
AEC1243	Foam Strip Seal - Case - On Back Top of Case	1
AEC1244	Foam Strip Seal - Liner - On Top of Liner	4
AEC1207	S. S. Rivet 1/8 x 3/16 - Secures Switch Box to Case	3
AEC1358	Conduit Connector, Plastic - Connect Conduit to Case	1
AEC1214	Conduit Lock Nut - Secures Connector to Case	1
<b>EC14</b>	<b>BRAKE PAD ASSEMBLY</b>	<b>2</b>
AEC1607	Brake Pad Support	1
AEC1608	Brake Pad	1
AEC1204	S. S. Rivet 1/8 x 3/16 - Secures Brake Pad to Brake Pad Support	2
<b>EC16</b>	<b>BRAKE LEVER ASSEMBLY</b>	<b>2</b>
EC14	Brake Pad Assembly	1
AEC1602	Brake Lever Arm	1
AEC1204	S. S. Rivet 1/8 x 3/16 - Secures Brake Pad Assembly to Lever Arm	2
<b>EC17</b>	<b>MOTOR MOUNTING PLATE ASSEMBLY</b>	<b>1</b>
CEC1501	Motor Mounting Plate	1
AEC1512	Brake Spring Guide Pin (Comes with CEC1501)	2
AEC1601	Brake Support Bracket	2
AEC1823	S. S. Rivet 5/32 x 1/8 - Secures Support to Plate	4
AEC1223	Shock Bumper Ring	3

Parts Required Per SUITMATE®

PART NUMBER	DESCRIPTION	QUANTITY
	<b>MOTOR MOUNTING PLATE ASSEMBLY - continued</b>	
AEC1228	S. S. Flat Washer (#10) - Secures Bumper to Plate	3
AEC1206	S. S. Rivet 3/16 x 1/4 - Secures Bumper to Plate	3
AEC1202	Black Shock Mount	3
AEC1224	S. S. Nut 5/16 - Secures Shock Mount to Bumper	3
<b>EC18</b>	<b>MOUNTING PLATE / BRAKE LEVER ASSEMBLY</b>	<b>1</b>
EC17	Motor Mounting Plate Assembly	1
EC16	Brake Lever Assembly	2
AEC1614	Brake Hinge Pin - Secures Lever to Brake Support	2
AEC1603	White Plastic Bushing - Separates Pin / lever	4
AEC1827	Nylon Washer - Separates Brake Lever / Support	4
AEC1823	S. S. Rivet 5/32 x 1/8 - Secures Brake Hinge Pin to Bracket	2
AEC1612	S. S. Compression Spring	2
AEC1609	S. S. Flat Washer (1/4") - Separates Spring / Bushing	2
AEC1603	White Plastic Bushing - Separates Washer / Lever	2
<b>EC20</b>	<b>BASKET</b>	<b>1</b>
<b>EC22</b>	<b>BASKET AND BRAKE DISC ASSEMBLY</b>	<b>1</b>
EC20	Basket Assembly	1
CEC1701	Aluminum Hub	1
BEC1702	S. S. Brake Disc - Machined	1
AEC1610	S. S. Basket Roll Pin - Secures Basket to Hub	3
AEC1703	S. S. Pan Head Screw 8/32 x 1/2 - Secures Disc to Hub	3
AEC1704	S. S. Lock Washer (#8) - Separates Screw from Disc	3
<b>EC24</b>	<b>DRIVE UNIT ASSEMBLY</b>	<b>1</b>
EC18	Mounting Plate / Brake Levers Assembly	1
EC22	Basket and Brake Disc Assembly	1
BEC1502	Motor	1
AEC1504	S. S. Motor Mount Spacer - Separates Motor from Plate	3
AEC1822	Special Aluminum Spacer - Separates Motor from Plate	1
AEC1505	S. S. Hex Head Bolt 3/16 x 3/4 - Secures Motor to Plate	4
AEC1203	S. S. Split Lock Washer (3/8) - Separates Bolt from Plate	4
AEC1506	Hub Roll Pin - Secures Hub to Motor Shaft	1
AEC1620	Threaded S. S. Brake Rod	2
AEC1622	Short Compression Spring	2
AEC1624	S. S. Nyloc Locknut 1/4-20	2
<b>EC3</b>	<b>SUITMATE ASSEMBLY</b>	<b>1</b>
EC12	Case Assembly	1
EC24	Drive Unit Assembly	1
EC6	Sub-Top Assembly	1



Parts Required Per SUITMATE®

PART NUMBER	DESCRIPTION	QUANTITY
	<b>SUITMATE ASSEMBLY - continued</b>	
EC4	Top Assembly with Lid	1
AEC1231	SUITMATE Color Strip	1
AEC1605	Black Brake Tip	2
AEC1218	GFCI Junction Box	1
AEC1220	GFCI Junction Box Hole Plug	1
AEC1247	GFCI Junction Box Cover	1
AEC1251	GFCI Junction Box Cover Screw 6/32 x 1/2	1
AEC1821	Faceless GFCI with Screws	1
AEC1820	GFCI Screw 6/32 x 3/4 Phillips (Comes With AEC1821)	2
AEC1233	GFCI Junction Box Label	1
AEC1212	Offset Connector - Connects Junction Box to Microswitch Box	1
AEC1214	Conduit Lock Nut - Secures Offset Connector	2
AEC1357	Cable Conduit - Connects Switch Box to Motor	1
AEC1360	Conduit Connector - 90 degree - Plastic - Connects Conduit to Motor	1
AEC1358	Conduit Connector, Plastic - Connects Conduit to Switch Box	1
AEC1214	Conduit Lock Nut - Secures Connector to Switch Box	1
AEC1813	Neutral Wire, White - Connects Motor to GFCI	1
AEC2061	Ground Wire, Green - Connects Motor to GFCI	1
AEC1817	Motor Disconnect - Connects Wires to Motor	2
AEC1819	Flange Fork Connector - Connects Ground to Motor	3
AEC1819	Flange Fork Connector - Connects Ground to GFCI	3
AEC1224	S. S. Nut (5/16) - Secures Shock Mounts to Case	3
AEC1238	S. S. Split Lock Washer (5/16) - Separates Nut from Case	3
AEC1248	Black Drain Tube	1
AEC1249	S. S. Hose Clamp - Secures Drain Tube to Black Liner	1
AEC1236	Serial Number Identification Label	1
	<b>MOTOR PARTS AND OTHER MATERIALS</b>	
AEC1905	Motor Switch	1
AEC1906	Motor Capacitor	1
AEC1907	Motor End Frame	1
AEC1908	Motor Thermal Breaker	1
AEC1909	Motor Bearing	1
AEC1910	Motor End Cap	1
AEC1102	S. S. Wall Mount Bracket	1
AEC1108	Wall Sign - Combination	1
AEC1246	Hub Removal Tool	1



**SUITEMATE®**

**Extractor Corporation**

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# WARRANTY

EXTRACTOR CORPORATION ("EC") warrants to the purchaser of their manufactured equipment that for one (1) year after purchase the equipment shall be free from any defects in workmanship.

Purchaser agrees that as a pre-condition to any EC liability hereunder, purchaser shall fully inspect all goods immediately upon delivery to purchaser and shall give EC written notice of any claim or purported defect within ten (10) days after discovery of such defect. As a further pre-condition to any EC liability hereunder, purchaser shall return said purportedly defective equipment, freight prepaid, to the plant of the manufacturer. EC shall inspect all returned equipment, and, if said equipment is found defective, shall, at its option as purchase's sole and exclusive remedy, repair or replace such equipment or any defective component or part thereof which proves to be defective, or refund the net purchase price paid by the original purchaser. Alterations or repairs by others or operation of such equipment in a manner inconsistent with EC accepted practices and all operating instructions shall void this warranty. EC shall not be liable for defects caused by the effects of normal wear and tear, erosion, corrosion, fire or explosion.

EC's sole and exclusive liability under this warranty is to the original purchaser and shall not exceed the lesser of the cost of repair, cost of replacement, or refund of net purchase price paid by the original purchaser, EC is not liable for any other losses, damages, or costs of delays, including incidental or consequential damages. EC SPECIFICALLY MAKES NO WARRANTIES OR GUARANTEES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, OTHER THAN OR WHICH EXTEND THOSE WARRANTIES EXPRESSED HEREIN.

