



Apex 20'' Battery Burnisher (BB-2)

INTRODUCTION

OPERATING & MAINTENANCE INSTRUCTIONS

READ THIS BOOK

This operator's book has important information for the use and safe operation of this machine. Read this book carefully before starting the machine. Keep this book and tell all operators to read the book. If you do not follow the instructions, you can cause an injury or damage equipment, furniture or buildings.

For new books write to:

Triple S
2 Executive Park Drive
Billerica, MA 01862

Carefully inspect all components to ensure that there is no concealed freight damage. If such damage is discovered, file a "CONCEALED DAMAGE REPORT" immediately with the delivering carrier.

The contents of this manual are based on the latest product information available at the time of publication. **Triple S** reserves the right to make changes or improvements to its machines without notice.

FOR YOUR CONVENIENCE, RECORD THE FOLLOWING IMPORTANT INFORMATION:

MODEL _____

SERIAL NUMBER _____

PART NUMBER _____

DATE PURCHASED _____

IMPORTANT SAFETY INSTRUCTIONS

READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS BEFORE USING THIS MACHINE!

WARNING! To reduce the risk of fire, electric shock, or injury:

1. You must have training in the operation of the machine before using it. **READ THE INSTRUCTION BOOK AND CHARGER MANUAL.** If you do not understand any instruction, ask your supervisor.
2. Make sure all labels, decals, warnings, cautions and instructions are fastened to the machine.
3. Read the labels carefully on the machine. Do not cover them for any reason and replace them if damaged.
4. Do not operate this machine unless it is completely assembled. Inspect the machine carefully before operation.
5. Pay close attention to other people and especially children while operating this machine.
6. Be a careful operator, do not strike shelving or scaffolding, especially where there is a danger of falling objects.
7. Machines can cause an explosion when operated near flammable materials and vapors. Do not use this machine with or near fuels, grain dust, solvents, thinners or other flammable materials.
8. In case of fire, use a powder extinguisher. Do not use water.
9. Do not use machine as a means of transport.
10. Do not use acid solutions that could damage the floor.
11. Adjust your speed to the conditions of the floor.
12. Do not turn the machine on a ramp. Do not stop and leave the machine on a ramp or incline.
13. When the machine is parked, move switch to the OFF position (red button switch pressed down all the way).
14. During any maintenance operation, disconnect the power supply from the machine.
15. Lead acid batteries generate gases that can cause an explosion. Read the instruction manual supplied with the battery charger. Keep sparks and flames away from batteries. **NO SMOKING.** Charge the batteries only in an area with good ventilation.
16. Do not use a charger if the power cord is damaged.
17. Always wear eye protection and protective clothing when working near batteries. Remove all jewelry. Do not put tools or other metal across the battery terminals or the tops of the batteries.
18. Maintenance and repairs must be performed by Authorized Service Centers only. Make adjustments according to the specifications given in the manual for this machine.
19. Keep the electrical parts of the machine dry. Do not wash the machine with direct water jets or high pressure, nor with corrosive material. For storage, keep the machine in a dry building.
20. Always put CAUTION signs near the area where you are working.
21. Do not reach under shrouds with fingers, hands or toes when the machine is running.

OPERATING INSTRUCTIONS

WARNING! For the safe operation of this machine follow the instructions given in this booklet and the training given by your supervisor. Failure to do so can result in personal injury and/or damage to machine and property!

DO NOT OPERATE MACHINE IN AN EXPLOSIVE ENVIRONMENT!

The model shown in this manual is intended for commercial use.

PREPARATION

To prepare the machine for operation, make sure the batteries are charged and the machine is properly assembled. If in doubt, ask your supervisor.

Be prepared by having your floor area cleared and ready for the fast action of a burnisher.

Prepare the floor area by sweeping, dusting or mopping as needed. Check the proper application recommendations and procedures found on the label of your finish container. IF IN DOUBT, CALL YOUR SUPERVISOR.

WARNING! NEVER USE THIS MACHINE WITH FLAMMABLE OR EXPLOSIVE MATERIAL!

BATTERY INSTALLATION

1. Make sure the **Red On/Off Switch** is in the **OFF** position (pushed completely down).
2. Lift and remove the **Upper Hood Cover**.
3. Place the batteries in their compartment and follow the “**Under Hood Electrical Connections**” Drawing on page 5.

BATTERY CHARGING

1. Insure that you have the proper charger or charger setting for your type of batteries, either conventional wet, lead acid or sealed “maintenance free”, gel cell/ AGM batteries.
2. Read and follow the charger instructions.
3. Move the **Red On/Off** to the **OFF** position (pushed completely down).
4. Lift and remove the **Upper Hood Cover**.
5. Connect the charger plug into the mating plug on the machine. It is located at the rear of the machine.

WARNING! NEVER ALLOW THE BATTERIES TO RUN COMPLETELY DOWN, recharge them when the **Battery Condition Meter** reading is on “**RECHARGE**”.

6. Plug the charger into a grounded outlet that has the proper voltage.

WARNING! NEVER TURN THE MACHINE ON WHILE CHARGING!

7. After charging the batteries, disconnect the charger from the outlet and machine. See battery maintenance on page 4.

PAD INSTALLATION

For Burnishing: Select the correct clean burnishing pad (your supplier can help you). Make sure that the pad is for ultra high speed burnishing.

NEVER OPERATE THE MACHINE WITHOUT THE FLOOR PAD INSTALLED!

It is very important to select clean, dry pads of uniform thickness. Pads with high or low sections or hard or soft spots are unacceptable. Pads of open weave are recommended because close weaves tend to load up fast, bog down the machines, cause circuits to overload and generally give poor results.

1. Lift the pad assembly off the floor by lifting lever. Lock in full “up” position.
2. Unscrew the **Pad Retainer** by turning it clockwise (when viewing bottom of pad).
3. Install or replace the pad.
4. Center the new pad on the **Pad Driver**.
5. Screw the **Pad Retainer** back on by turning it counter-clockwise (when viewing bottom of pad). Check and re-tighten periodically as **Pad Retainer** may loosen during operation.

OPERATION

1. Make sure the pad is on and attached properly. See “**Pad Installation**”.
2. Reduce the pad pressure by turning the **Caster Knob** clockwise.
3. Move the **Switch** to the **ON** position (pulled completely up), the **Green Indicator Light** will come on.
4. Check the **Battery Condition Meter** before operating. The meter should be in the “**Working Range**”.
5. Squeeze one or both **Switch Levers** and start burnishing by pushing machine in a slow and steady path. **Keep machine moving while pad is on or floor damage will occur!**
6. Check the **Load Meter** for **PROPER PAD PRESSURE**:
 - A. With machine turned on and levers in the operating position, check **Load Meter** for pressure:
 1. **White area - pressure is too low**
 2. **Green area - pressure is good**
 3. **Red area - pressure is too high**
 - B. To adjust to desired pressure:
 1. Turn **Caster Knob** clockwise to raise pad and decrease pressure.
 2. Turn **Caster Knob** counter-clockwise to lower pad and decrease pad pressure.
 - C. For the best performance, the **Load Meter** should be kept in the “**Green**” area. A green arrow above the Green area indicates the best pressure.

NOTE: Too much pad pressure may trip the circuit breaker. See “Resetting the circuit breaker” on page 4.

MAINTENANCE & TROUBLE SHOOTING

PREVENTATIVE MAINTENANCE

WARNING! Always move the On/Off Switch to the OFF position (pushed all the way down) before performing any service, maintenance, pad changing or inspection of the machine.

After each use:

1. Empty the filter bag
2. Check the filter bag for rips.
3. Remove the pad and clean thoroughly.
4. Wipe the entire machine down with a clean cloth.
5. Store the machine inside in a clean, dry area.

Weekly:

1. **For conventional, wet, lead acid batteries:** Check the level of the electrolyte in the batteries. Maintain the proper electrolyte level by adding **distilled water** when necessary. Electrolyte levels lower during discharge and rise during charge. Therefore, it is mandatory that water be added to cells **ONLY** when they are fully charged; do not overfill. Old batteries require more frequent additions of water compared to new batteries. **DO NOT ATTEMPT TO OR REMOVE VENT CAPS ON SEALED, "MAINTENANCE FREE", GEL CELL OR AGM BATTERIES. WATER CANNOT BE ADDED TO THOSE TYPE OF BATTERIES. DAMAGE WILL OCCUR AND WARRANTY WILL BE VOIDED.**
2. Keep tops of batteries clean and dry to prevent excessive self-discharge. Keep battery terminals reasonably tight.
3. Check battery connections.

Monthly:

1. Check the batteries with a hydrometer.
2. Clean battery terminals.
3. Check for any loose bolts or screws.

TROUBLE SHOOTING

Green light will not come on:

1. Check batteries
2. Check battery connections
3. Check wire connections to light
4. Check light

Motor will not run:

1. Check circuit breaker
2. Check batteries
3. Check battery connections
4. Check wire connections to switch
5. Check wire connections to motor
6. Check motor

Circuit breaker is tripped:

1. Check/decrease pad pressure
2. Check motor
3. Check wires

Resetting the circuit breaker:

1. Wait approximately 5 minutes and then press down on circuit breaker button to reset.
2. Turn the **Caster Knob** clockwise to raise the pad. Refer to the Operating Instructions on page 3, Item 6 regarding "Proper Pad Pressure".
3. Replace pad if necessary.

SSS APEX BATTERY BURNISHER (BB-2) FINAL ASSEMBLY



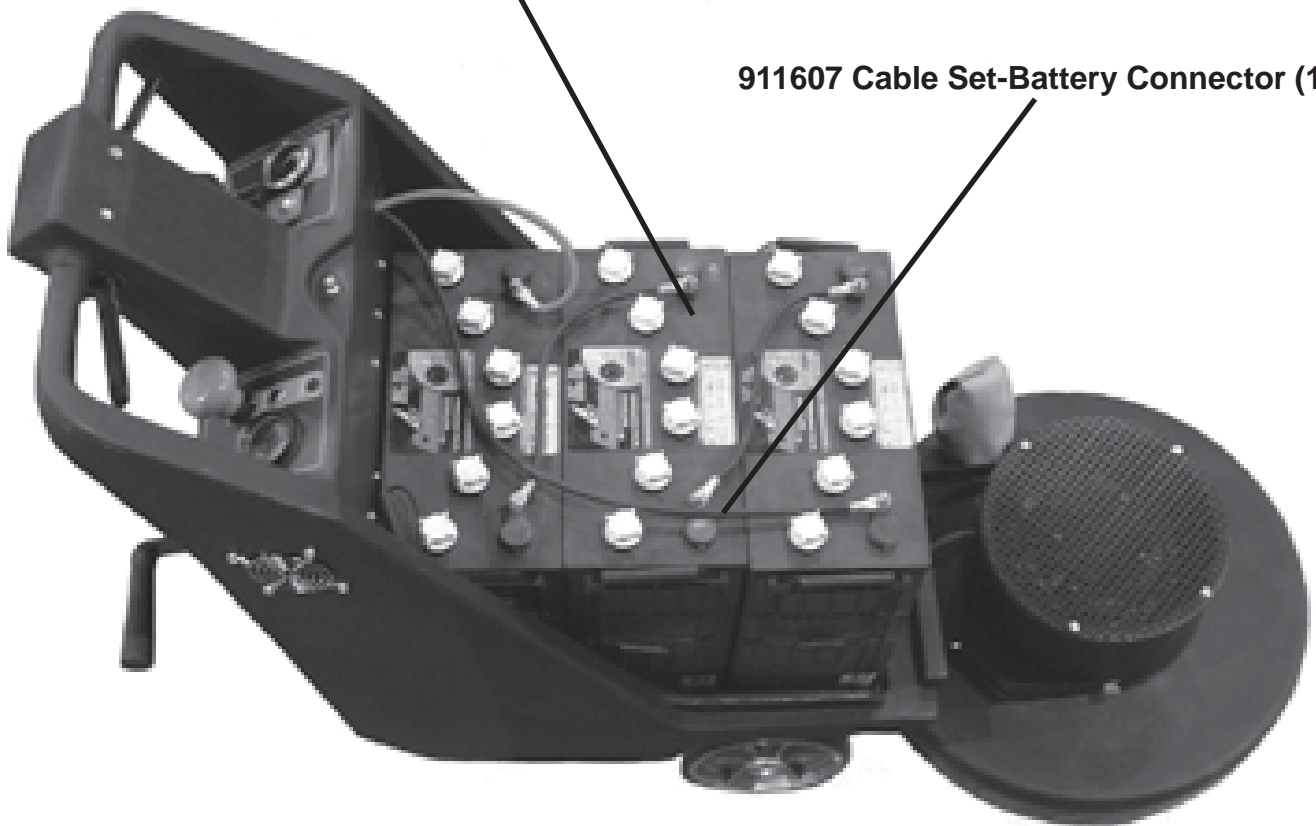
Not Shown (Items to Attach Skirt):

- 528001 Strap-Skirt (1)
- 962186 Screw-10-32x1-1/8 (1)
- W107D Washer-3/16 Flat SAE (2)
- 920001 Nut-10-32 Nyloc Stop (1)

SSS APEX BATTERY BURNISHER (BB-2) BATTERY ASSEMBLY

861307 Battery-215AH 12V (3)

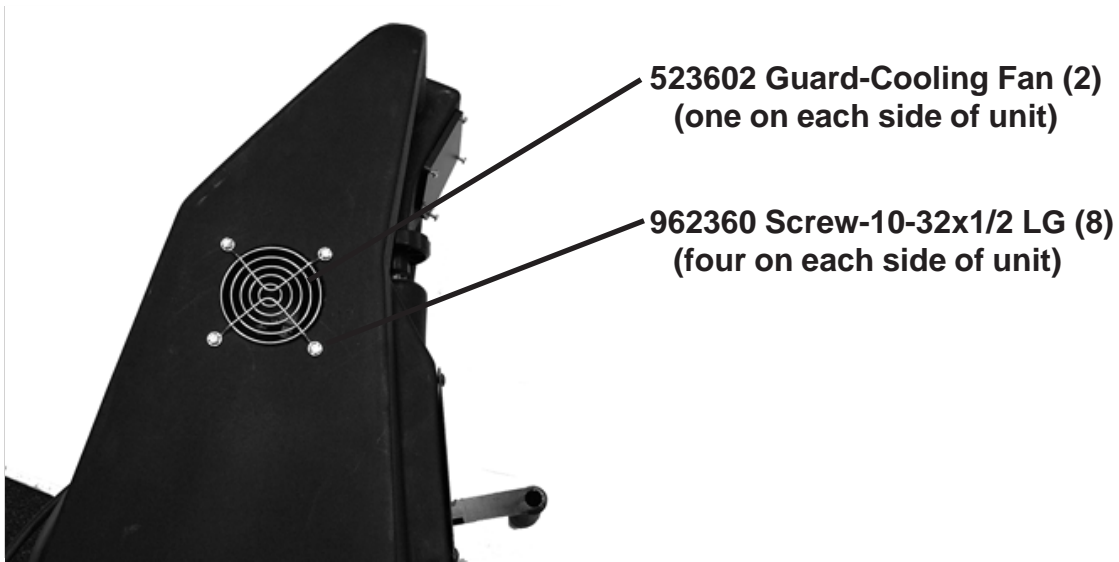
911607 Cable Set-Battery Connector (1)



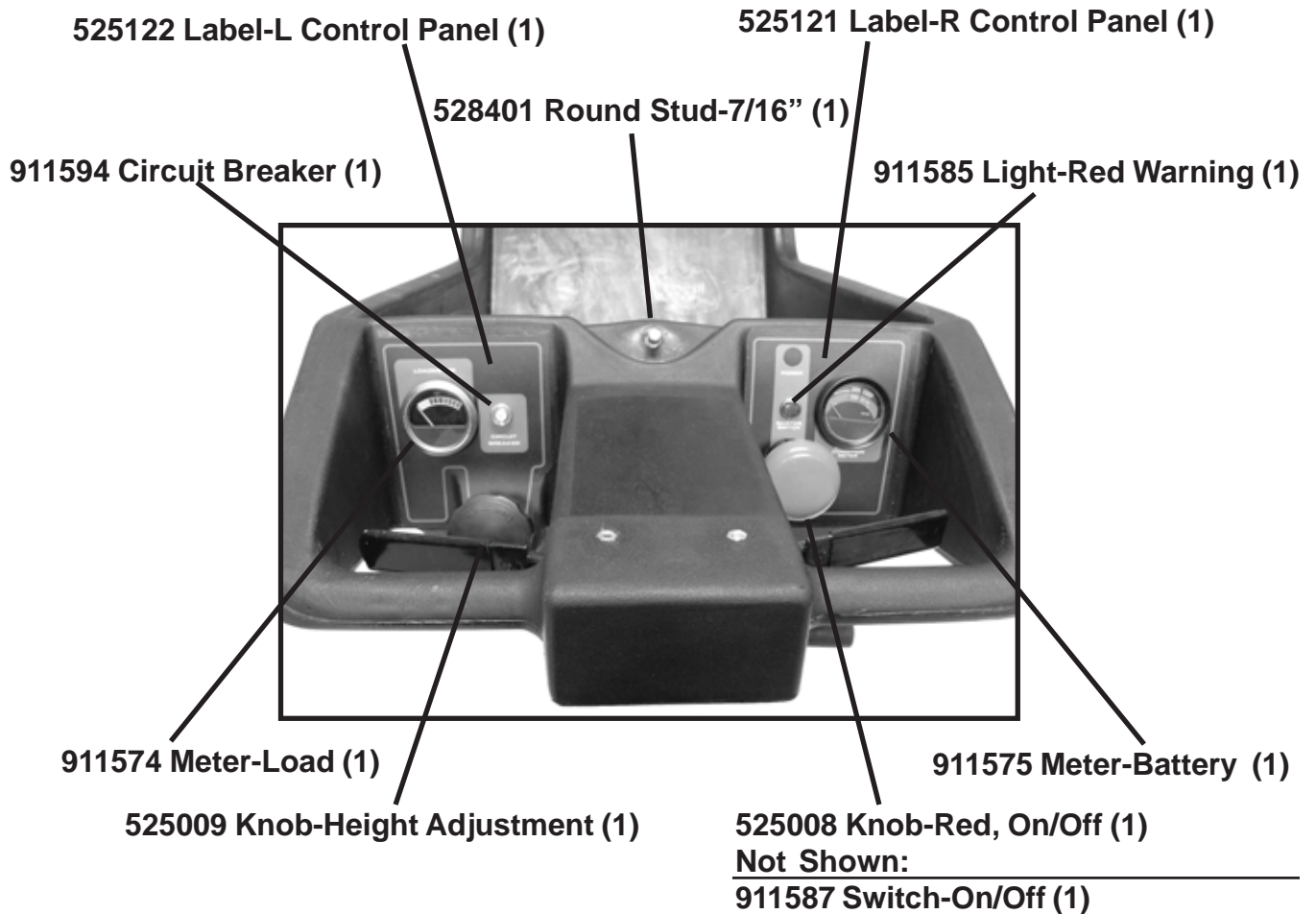
Not Shown:

862411 Charger-36V/25 Amp (1)

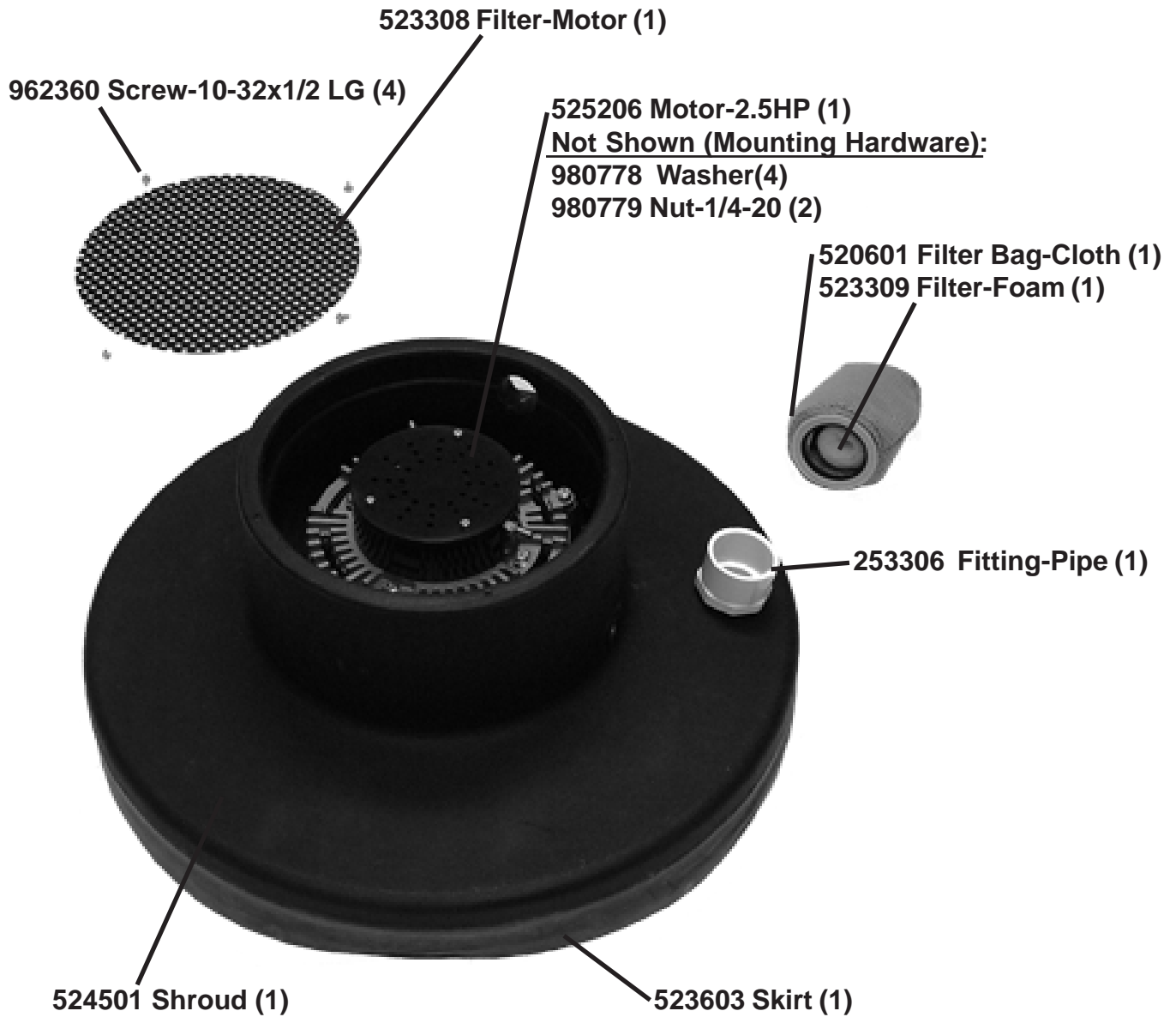
SSS APEX BATTERY BURNISHER (BB-2) SIDE COOLING GUARD ASSEMBLY



SSS APEX BATTERY BURNISHER (BB-2) SIDE CONTROL PANEL ASSEMBLY



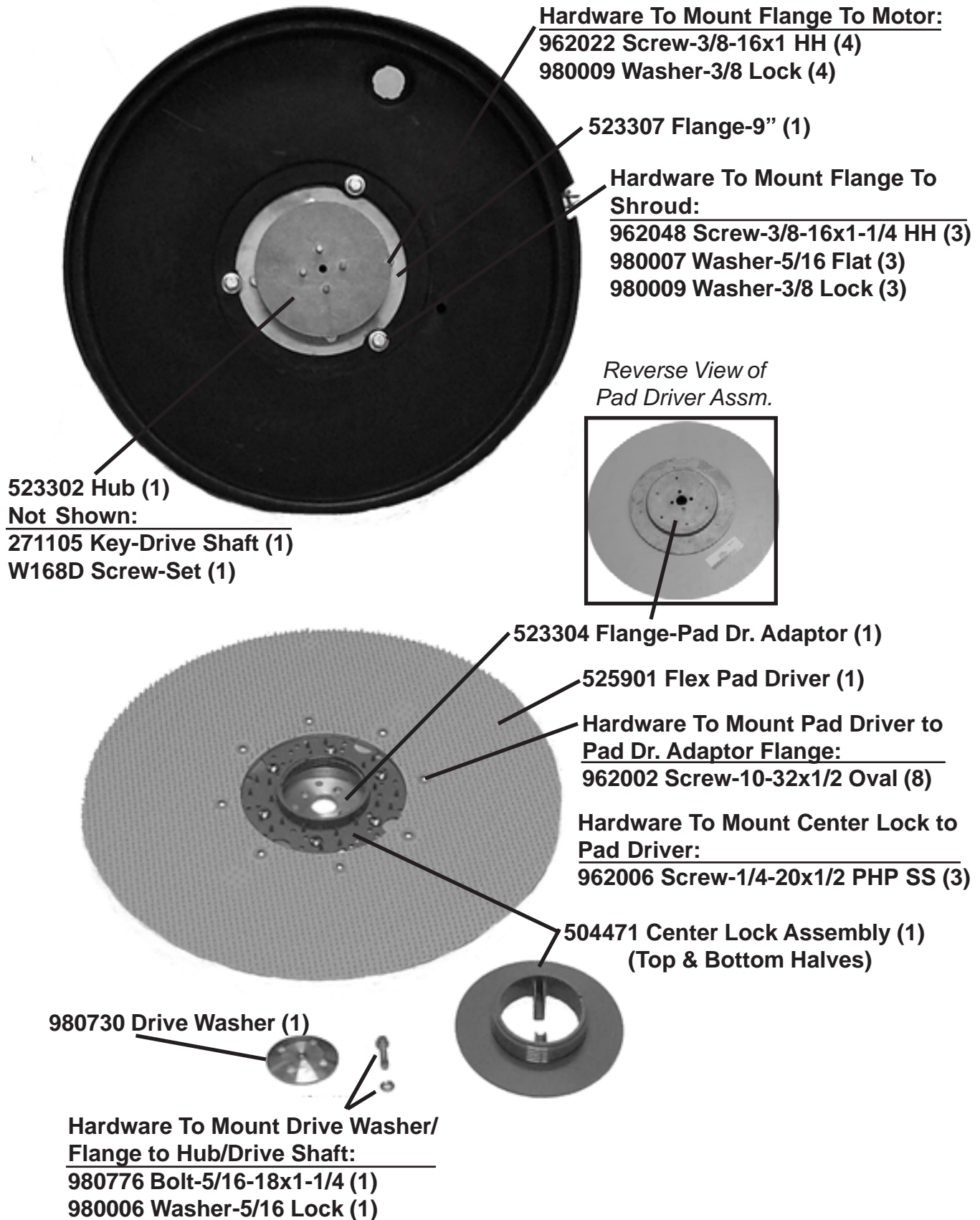
SSS APEX BATTERY BURNISHER (BB-2) MOTOR & DUST CONTROL ASSEMBLY



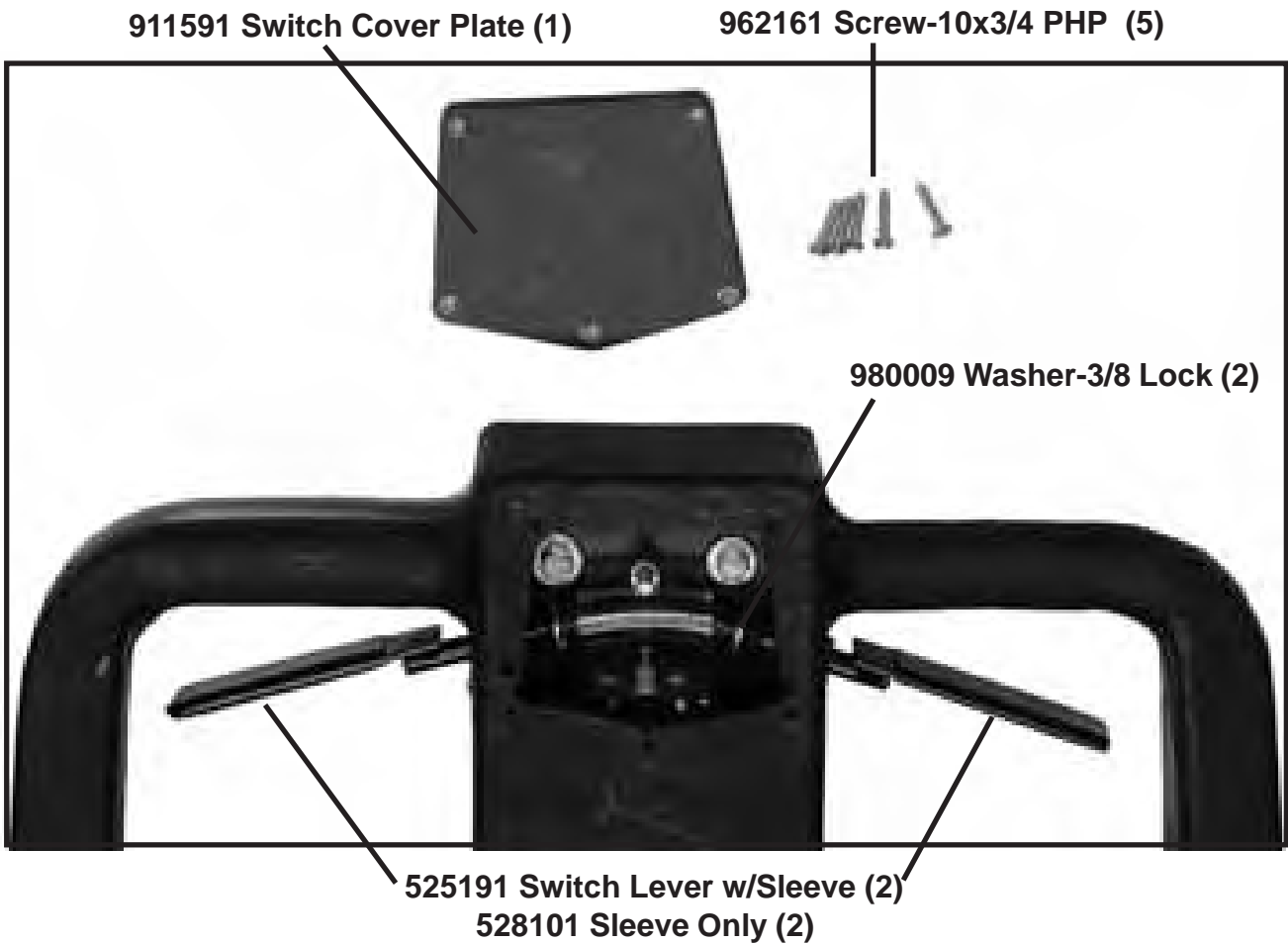
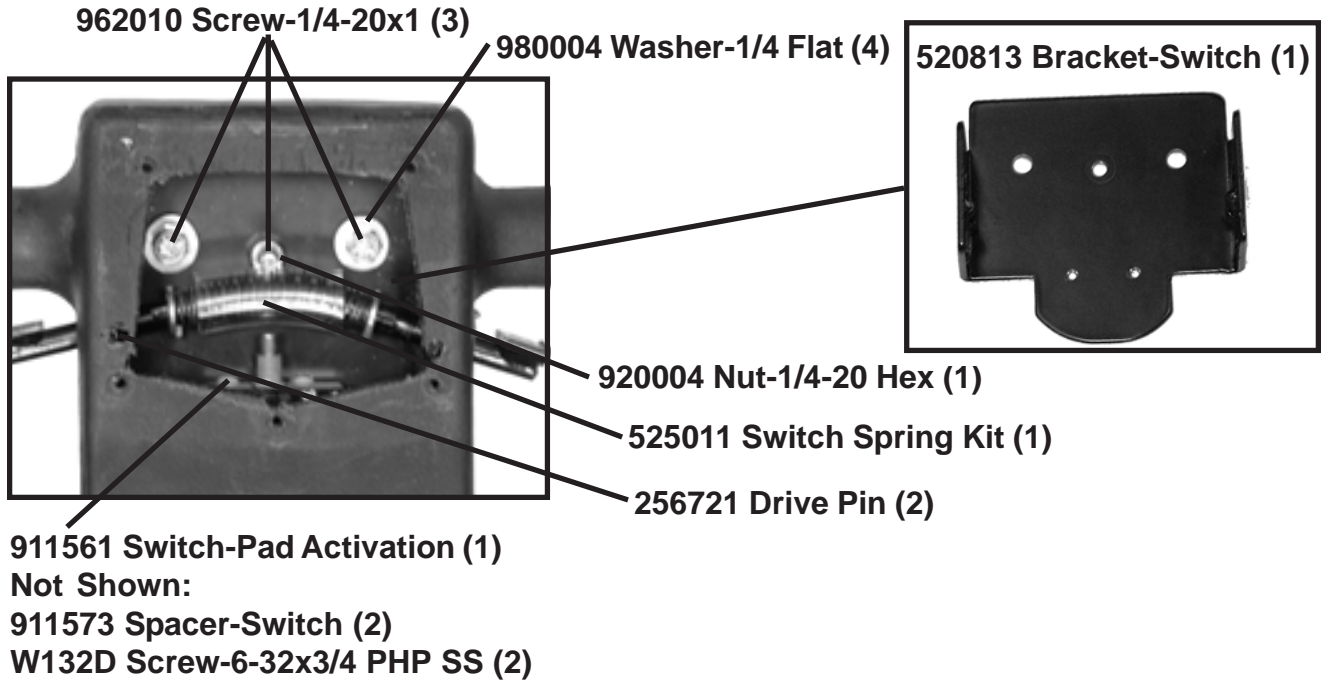
Not Shown (Items to Attach Skirt):

- 528001 Strap-Skirt (1)
- 962186 Screw-10-32x1-1/8 (1)
- W107D Washer-3/16 Flat SAE (2)
- 920001 Nut-10-32 Nyloc Stop (1)

SSS APEX BATTERY BURNISHER (BB-2) PAD DRIVER ASSEMBLY



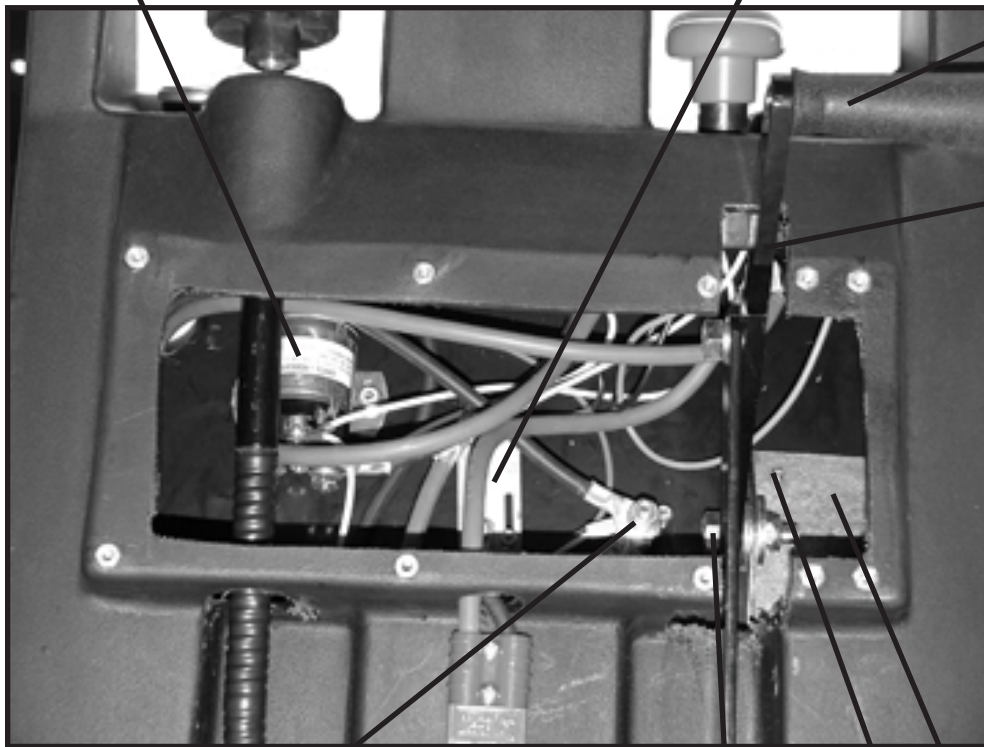
SSS APEX BATTERY BURNISHER (BB-2) SWITCH ASSEMBLY



SSS APEX BATTERY BURNISHER (BB-2) PANEL ASSEMBLY (CLOSE UP)

911297 Solenoid-DC Contactor (1)
W102D Screw-1/4-20x5/8 PHP (2)
W104D Washer-1/4 Flat (2)
920011 Nut-1/4-20 Elastic Stop (2)

528542 Shunt-Mounted (1)
962003 Screw-10-32x3/4 PHP (2)
920001 Nut-10-32 Nyloc (2)



523702 Handle Grip (1)

525113 Lift Handle (1)

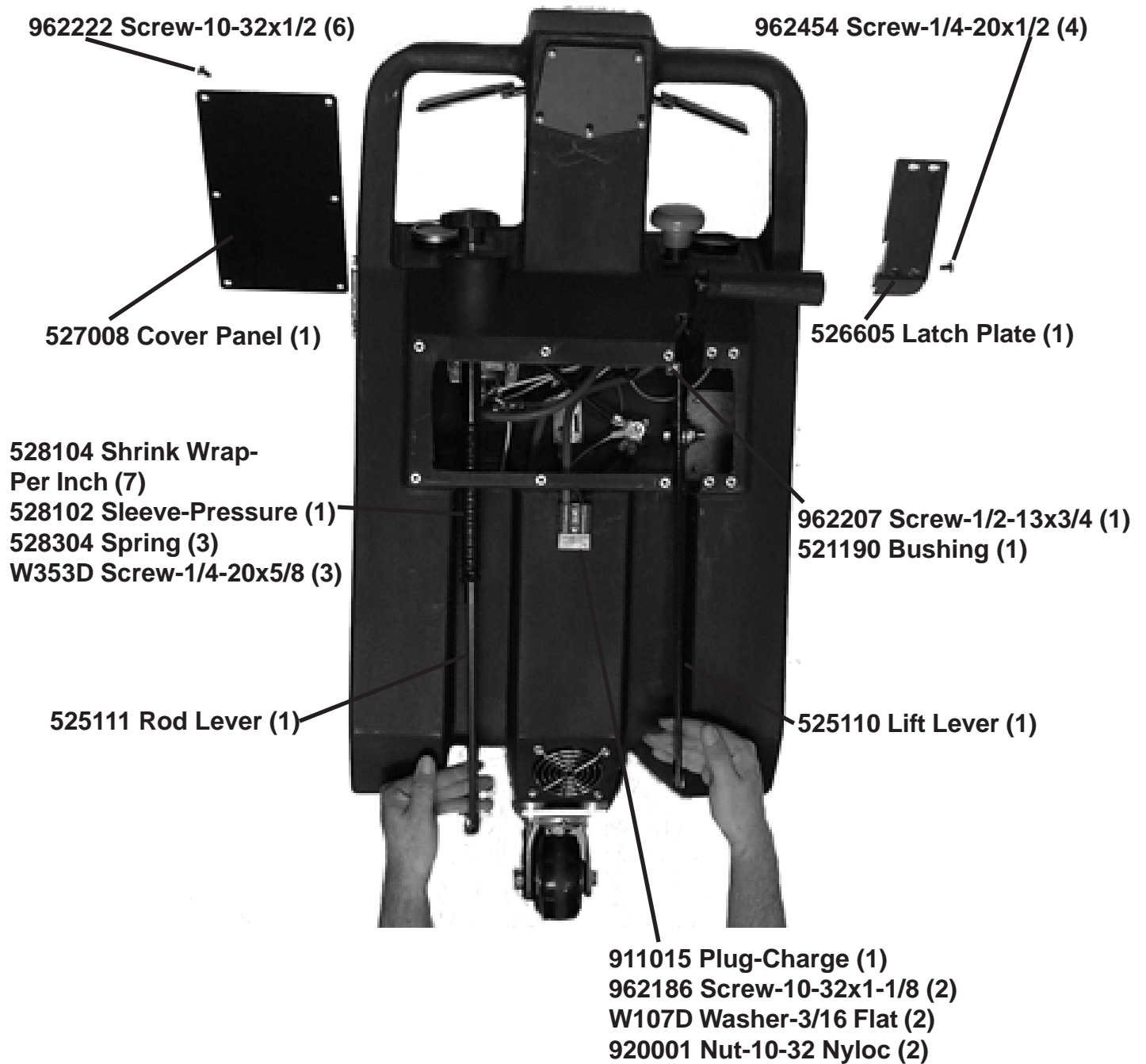
525112 Bracket-Lift Handle (1)

911610 Cable Stud (1)
962066 Screw-8-32x3/4 PHP (2)
W440D Nut-8-32 Hex w/Nyloc (2)

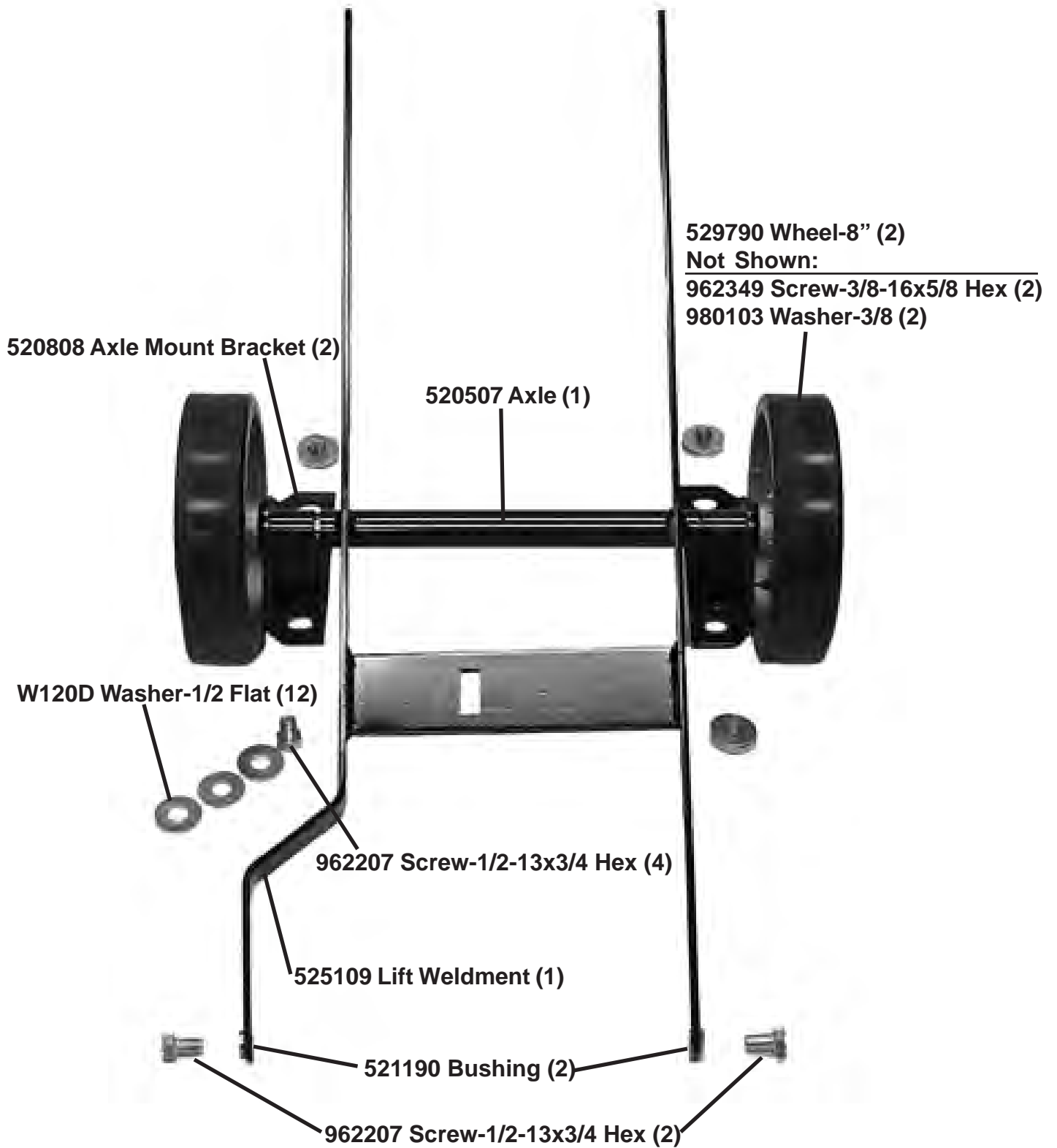
962006 Screw-1/4-20x1/2 PHP SS (4)

980777 Bolt-1/2-13x1-1/2 (1)
521190 Bushing (1)
W502D Nut-1/2-13 Thin Hex (1)
W120D Washer-1/2 Flat (2)

SSS APEX BATTERY BURNISHER (BB-2) PANEL & LEVER ASSEMBLY PARTS LIST



SSS APEX BATTERY BURNISHER (BB-2) FRAME ASSEMBLY

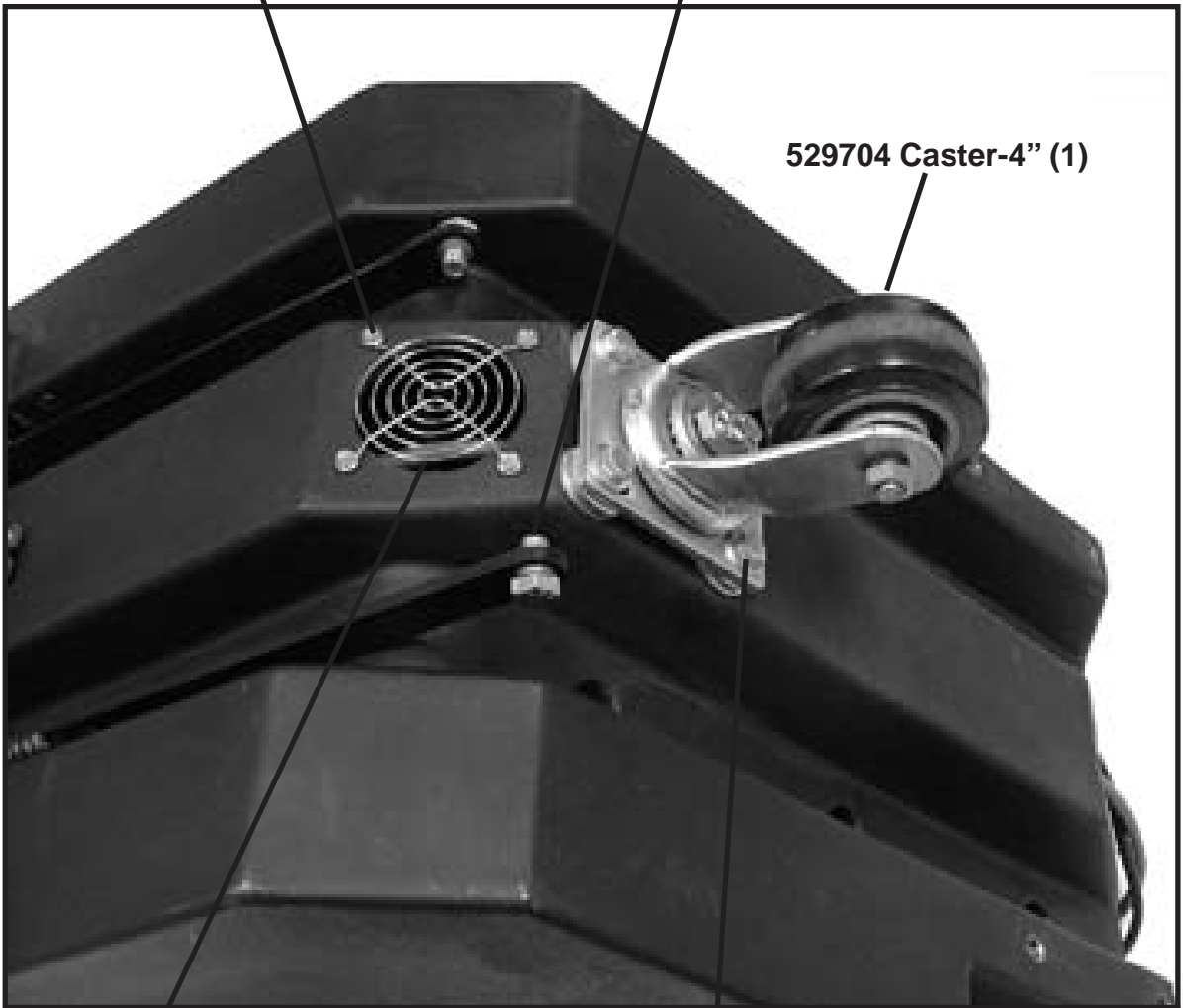


SSS APEX BATTERY BURNISHER (BB-2) REAR CASTER & COOLING VENT ASSEMBLY

Below image is the rear, underside of the chassis with the unit flipped forward

962360 Screw-Hex Hd, Self Tapping (4)

962207 Screw-1/2-13x3/4 Hex (2)
521190 Bushing (2)

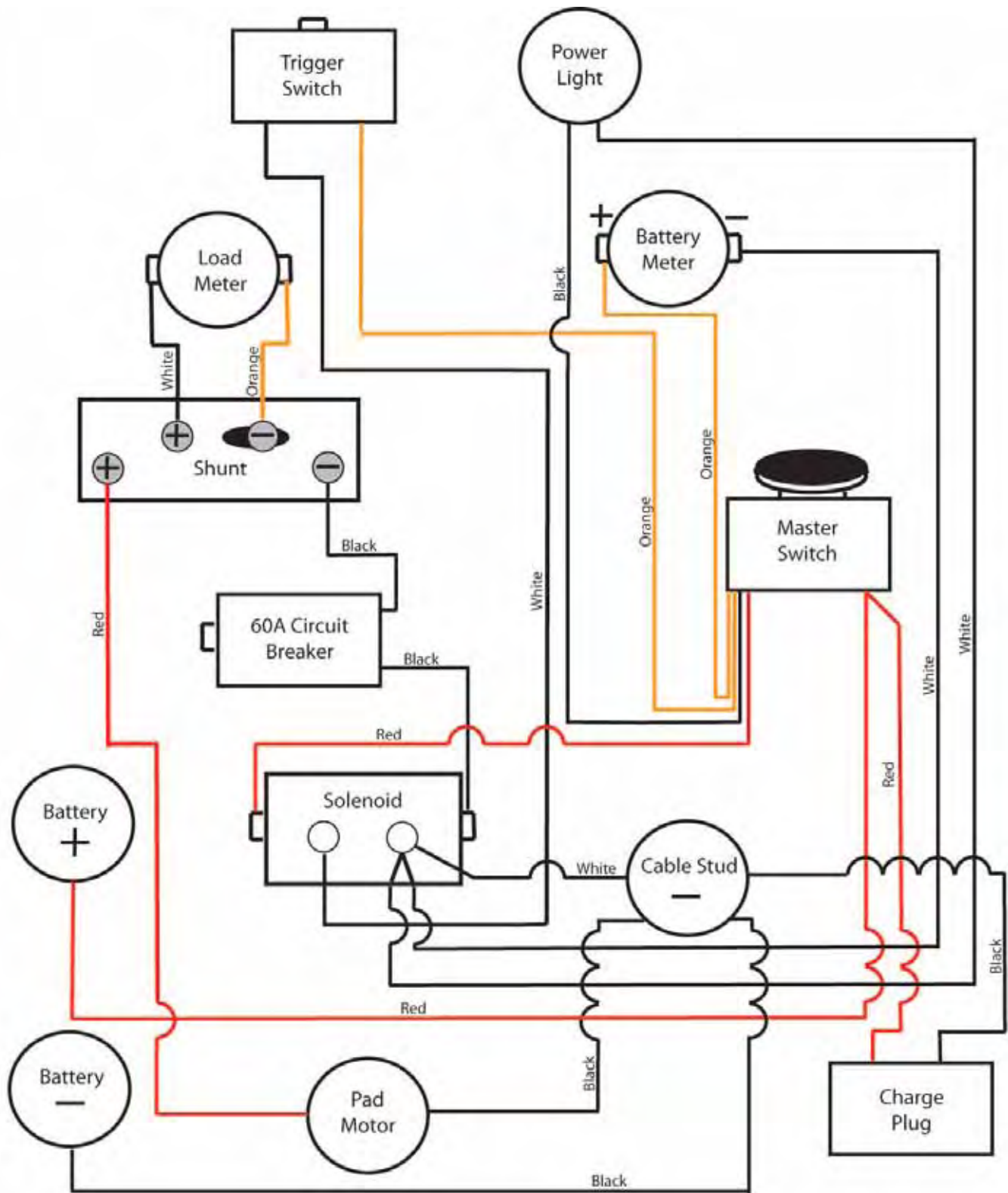


529704 Caster-4" (1)

523602 Guard-Cooling Fan (1)

962022 Screw-3/8-16x1 HH (4)
980007 Washer-5/16 Flat (4)
W120D Washer-1/2 Flat (12)

SSS APEX BATTERY BURNISHER (BB-2) WIRING DIAGRAM



WARRANTY POLICY

TRIPLE S APEX BATTERY BURNISHER (BB-2)

The **Triple S** Apex Battery Burnisher (BB-2) has been manufactured, tested and inspected in accordance with specific engineering requirements and is **WARRANTED** to be free from defects in workmanship and materials as follows from the date of purchase to the original user.

Five (5) Years Parts - Rotational molded components

Three (3) Years Parts - Main Frame

One (1) Year Parts & Labor – On all other components unless excluded below

<u>Part Number</u>	<u>Part Name</u>
911594	Circuit Breaker
529790	Wheel
523601	Skirt
529704	Caster

This warranty extends to the original user/purchaser and only when used, operated and maintained in accordance with **Triple S** Operating and Maintenance instructions.

This warranty does not apply to certain wear parts and accessories of the machine such as pads, fuses, bumpers, etc., nor does it apply to damage or failure caused by improper use, abuse or neglect. Warranty credit or replacement of return parts including motors, etc., is subject to incoming inspection of those items.

To secure repair under this warranty, the following procedure should be taken:

1. The inoperative machine or warranted parts must be delivered to the authorized dealer with shipping and delivery charges prepaid. If unable to locate the Dealer, you may contact **Triple S** at the address listed herein for the location of the nearest **Triple S** repair center or agent or for other instructions pertaining to your warranty difficulty.
2. Upon compliance with the above warranty procedure, all warranted repairs will be completed at no additional charge or cost to the user.
3. Only **Triple S** or its authorized dealers and agents may make no charge warranty repairs on this product. All others do so at their own risk.

This warranty limits **Triple S** liability to the repair of the product and/or warranted parts replacement and does not include incidental or consequential damages arising from the use of a **Triple S** machine whether defective or not.

BATTERY WARRANTY

In addition to the terms above, any original equipment **Triple S** Battery which becomes unserviceable under normal use within a period of ninety (90) days from date of sale to the original user will be repaired or replaced with one of equal specification at our option, F.O.B. any authorized Pacific Steamex Sales or Service Branch, with no charge to user, except transportation costs. After the expiration of the above ninety (90) day period, any battery which fails under normal use will be adjusted to the original user with a new battery of equal specification on a twelve (12) month pro rata basis from the date of purchase. Adjustment will be determined using the then current list price, plus transportation costs. Warranty is rendered null and void if damage or failure is caused by improper use, abuse or neglect of batteries.

This warranty is in lieu of all other expressed or implied warranties and is extended to the original purchaser/user.



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