# SUPER GALAXY 2000 PLUS & GALAXY OMEGA 8 FLOOR SANDER

# **Operator's Manual**



### GALAXY FLOOR SANDING MACHINES

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Member: National Wood Flooring Association

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### INTRODUCTION

Galaxy Floor Sanding machines are manufactured to the highest standards in the industry.

The components in your new Galaxy floor sander are machined in-house to exact specifications. During the assembly of your new sander, each and every part is re-checked to meet manufacturing specifications.

Take the time to read the complete operator's manual. This manual contains important information about the components, operation, care and maintenance of your new floor sander. With proper operation, care and maintenance, a Galaxy floor sander will provide years of trouble-free operation.

Galaxy believes in service. To this end, we have supplied the complete schematics of the equipment. Keeping your Galaxy in top shape also means using only GENUINE GALAXY REPLACEMENT PARTS. Call your distributor for replacement parts. Galaxy stocks all parts.

In the years to come, as your Galaxy floor sander continues in top form, you will further appreciate the engineering excellence that has gone into developing this product.

This manual contains important information regarding your new sander. Take the time to study the manual and become familiar with all of the advanced features present on your new Galaxy. Make certain all operators study the manual prior to operating the equipment.

Thank you for purchasing a Galaxy!

GALAXY FLOOR SANDING MACHINES Jim Tasikas — President

### GALAXY FLOOR SANDING MACHINES

# SUPER GALAXY 2000 PLUS & GALAXY OMEGA 8

 PATENTED DESIGN

 U.S.
 5341-605

 Canadian
 2.091.917

 Italian
 0561652

 German
 69311176.3

 Spanish
 93302162.2

 Swedish
 93302160.2

Other Patents Pending

Two machines in One. A drum sander. A belt sander.

### Super Galaxy 2000 Plus & Omega 8 Operator's Manual

#### IMPORTANT - All operators should read this manual

The Super Galaxy 2000 Plus/Omega Operator's Manual contains important information for the proper use and safe operation of this floor sander. Failure to read this manual prior to operating or servicing of the Super Galaxy 2000 Plus/Omega could result in injury to you or other personnel. Failure to read the manual could result in damage to the machine or property. All operators must have training in the operation of this floor sander before attempting to use it. If an operator cannot read English, explain this manual fully before allowing them to operate the floor sander.

All directions given, on the operation of the Super Galaxy 2000 Plus/Omega, in this manual, are seen from the operator's position, standing behind the floor sander.

For additional copies of this manual contact: Galaxy Floor Sanding Machines 84 Northline Road, Toronto, Ontario, Canada M4B 3E5 Telephone: (416) 285-6600 1-800-263-5667

### CHECKLIST OF ITEMS SHIPPED

- 1. GALAXY FLOOR SANDER
- 2. POWER CABLE 100 FEET LONG
- 3. TOOLS 2 ALLEN KEYS, 2 DRUM WRENCHES (2000 only),
- 4. DUST BAG CLAMP
- 5. DUST BAG
- 6. PAPER TIGHTENING WEDGES INSERTED IN THE DRUM (2000 only)
- 7. SANDPAPER CUTTING TEMPLATE (2000 only)
- 8.. WARRANTY DOCUMENTS
- 9. OPERATOR'S MANUAL

### SECTION ONE

Introduction	2
Checklist of Items Shipped	4
Operator Safety Instructions	6
Electrical Connection Instructions	9
Specifications	10

### SECTION TWO

How to Transport		12
Adjusting the Drum Height		14
Adjusting the Drum Pressure		14
Sanding Cuts and Sandpaper (2000)		15
Using as a Drum Sander (2000)		16
Using as a Belt Sander		19
Adjusting Belt Tracking		20
Machine Set Up		21
How to Operate the Floor Sander		22
Job Completion		22
Adjusting the Front Wheels		23
Troubleshooting		24
Routine Maintenance		26
Maintenance	SECTION THREE	27
Machine Schematics		31-39

### **OPERATOR SAFETY INSTRUCTIONS**

- DANGER: Failure to read the Operator's Manual prior to operating or attempting any service or maintenance procedure to your Galaxy Floor Sander could result in injury to you or other personnel. As well, damage to the machine or to other property could occur.
- DANGER: Sanding/finishing wood floors can create an environment that can be explosive. The following safety procedures must be adhered to:

### JOB SITE SAFETY PRECAUTIONS

- Cigarette lighters, pilot lights and any other source of ignition can create an explosion during a sanding session. All sources of ignition should be extinguished or removed entirely from the work area.
- Floor sanding machines can cause flammable material and vapors to burn. i.e., solvents, thinners, alcohol, fuels, certain finishes, wood dust, and other combustible materials can create an explosive environment. Read the manufacturer's label on all chemicals used to determine combustibility. Keep the work area well ventilated.
- Spontaneous combustion or an explosion can occur when working with sanding dust. The sanding dust can ignite and cause injury or damage. Sanding dust should be disposed of properly. DO NOT leave your container of sanding dust inside a building or vehicle.
- Empty the contents of the dust bag when the bag is 1/2 full. At ALL times, remove the contents of the dust bag each time you finish using the machine. NEVER leave a dust bag unattended.
- DO NOT empty the contents of the dust bag into a fire.
- Hitting a nail while sanding can cause sparks and create an explosion or fire. ALWAYS use a hammer and punch to countersink all nails before sanding floors.

### **MACHINE SAFETY**

DANGER: Operating a machine that is not fully assembled could result in injury or property damage. DO NOT operate this machine until it is completely assembled. Keep all fasteners tight. Keep adjustments according to machine specifications.

### **MACHINE SAFETY continued**

- DANGER: Electrocution could occur if maintenance and repairs are performed on a unit that is not properly disconnected from the power source. Disconnect the power supply before attempting any maintenance or service.
- DANGER: Electrocution could occur if machine is used on ungrounded electrical power source. NEVER remove or disable the grounding supply conductor on the electrical cord. Consult an electrician if the grounding conductor is missing or if you suspect your circuit is not grounded properly.
- DANGER: Use of this machine with a damaged power cord could result in an electrical shock. DO NOT use the machine if the power cord is damaged. DO NOT pull on the electrical cord to move the machine.
- DANGER: Electrocution or injury could occur if the power cord is run over or damaged by the sander. Keep the cord free from under the machine to avoid contact with the sand paper. Always lift the power cord over the machine.
- DANGER: Moving parts of this machine can cause serious injury and/or damage. Keep hands, feet and loose clothing away from all moving parts of the sander.
- DANGER: Operating a sander without all guards, doors or covers in place can cause injury or damage. Always check to make sure that all of the guards, doors and covers aresecure and in place.
- DANGER: Injury to the operator or bystanders could occur if the machine's power is on while performing maintenance, changing or adjusting the belt, or changing the dust bag.

### SAFETY FIRST

- WARNING: Failure to read and observe all safety statements found on your machine or in this Operator's Manual can result in serious injury or damage. Read and observe all safety statements.
- WARNING: Sanding dust can be airborne and can be breathed in while operating a sander. ALWAYS wear a dust mask while operating sanding equipment.
- WARNING: Injury to eyes and/or body can occur if protective clothing and/or equipment is not worn while sanding. ALWAYS wear safety goggles, hearing protection and protective clothing.
- WARNING: Make sure the power switch is in the off position and the drum is disengaged before plugging in the power cord.

### **SAFETY FIRST continued**

- CAUTION: Prior to attempting any repairs please contact your local Galaxy distributor or head office. Repairs performed by unauthorized personnel could result in damage or injury and void your warranty.
- CAUTION: DO NOT use the floor sander to move other objects, to climb on as a step or furniture, and DO NOT ride on the equipment.
- CAUTION: DO NOT place weights on the floor sander.
- CAUTION: Damage could occur to the machine if not properly kept in a dry building for storage. Store the machine in a dry environment.
- CAUTION: The machine is heavy. When transporting the machine, get help to lift the machine and motor using the proper carrying handles. When an assistant is not available, remove the motor before attempting to move the machine.
- CAUTION: Serious damage to the floor can occur if the machine is left running in one spot while the sanding drum is in contact with the floor. DO NOT dwell while lowering or raising the sanding drum. ALWAYS sand at a constant rate.

### **MACHINE SAFETY STATEMENTS**

The following information signals potentially dangerous conditions to the operator and/or equipment. Read this manual carefully and familiarize yourself with the machine. Know when these conditions can exist. Locate all safety devices on the machine. Then, take the necessary steps to train the personnel that will be operating the machine. Encourage operators to report machine damage or faulty operation immediately.

- 1. Keep hands and clothing clear of rotating parts.
- 2. Keep hands on controls when the motor is running.
- 3. DO NOT leave the machine when the motor is running.
- 4. DO NOT operate the machine with the access door open or the belt guard removed.
- 5. ALWAYS operate the machine with the dust bag in place.
- 6. DO NOT remove the dust bag with the motor running.
- 7. ALWAYS disconnect the motor pigtail power cord from the handle before servicing the machine.
- 8. ALWAYS operate in a well ventilated area.
- 9. ALWAYS dispose of sanding dust properly.

### **ELECTRICAL CONNECTION INSTRUCTIONS**

CAUTION: This machine will operate only on AC current and on electrical voltage shown on the motor nameplate (208-204 volt). Make sure you have the correct frequency and voltage before connecting the power cord to an outlet.

This machine must be connected to an electrically grounded circuit in order to protect the operator from electric shock. This machine has an approved power cord with three conductors as well as a plug with three terminals. Connect the plug into a three-holed receptacle. For maximum protection against electric shock, use a circuit that is protected by a ground fault circuit interrupter.

- DANGER: Electrocution could occur if the ground pin is tampered with in any way. DO NOT cut, remove, or break the ground pin. DO NOT try to fit a three-terminal plug into a receptacle or connector body other than a three plug receptacle or connector body. If the outlet does not fit the plug, consult your electrical contractor.
- DANGER: Electrocution could occur if the machine is used with a damaged plug or power cord. If the cords or plugs are worn or damaged in any way, have them replaced by an authorized service person or electrician.
- DANGER: Electrocution could occur if the machine is exposed to water or rain. KEEP the machine dry.

### **EXTENSION CORDS**

Use only an approved three-pronged extension cord with two main conductors and one grounding conductor. This machine's power cord is a 10 gauge wire. This machine is equipped with a 100 ft. power cord. When greater range is needed follow the table to determine cable gauge of additional footage. Refer to the following chart for extension cord information.

Feet/Wire Gauge (Stranded Copper)				
Source Voltage	0 – 150′	150 – 250′		
208	10	Use Voltage Booster		
230	10	8		

If motor appears to labour or takes a considerably longer time to come up to speed, reduce sanding pressure.

### MACHINE SPECIFICATIONS



SUPER GALAXY 2000 PLUS FLOOR SANDER PATENTED BELT AND DRUM SANDER



GALAXY OMEGA 8 PATENTED BELT SANDER

#### MECHANICAL SPECIFICATIONS

Abrasive Belt Size (Using Drum) Sanding Drum Abrasive Speed Dust Fan Speed Dust Fan Air Flow Motor Leveling Control Operating Controls Sanding Pressure Adjustment Wheels Wheels – Models Bearings Weight 29 1/2" x 7 7/8" 2,300 Revolutions Per Minute 60,000 Linear Inches Per Minute 8,000 Revolutions Per Minute 320 CFM 60 HZ-24 AMP-208-240 Volt-7.5 HP Continuous Externally Adjustable Adjustable Lever Infinitely Adjustable Replaceable Metal or Non-Marking Polyethylene Lifetime Lubricated 225 Pounds (2000) 215 Pounds (OMEGA)

### SECTION TWO

Transporting

### Adjustments

### Preparing the Machine Using the Drum (2000 only)

Preparing the Machine Using the Belt

Machine Set Up

How to Operate

Adjusting the Wheels

Troubleshooting

Maintenance

### HOW TO TRANSPORT THE MACHINE

WARNING: The machine is heavy. Remove the motor from the machine before transporting. Get help loading the machine and motor.

### Transporting the Machine - One Person

To transport the machine, follow this procedure:

- 1. Make sure the power cable is disconnected from the electrical outlet.
- 2. Disconnect the power cord connection. (Twist and pull)
- Loosen the belt tension T-screw completely. (Figure 1)
- 4. Pull downward on the belt guard to gain entry to drive belts. (Figure 2)
- 5. Remove the drive belts (Figure 3).
- 6. Unscrew the motor release screws a 1/2 turn. Pull the motor release pins clear of the motor. (Figure 4)
- 7. Straddle the machine. With your legs, lift the motor off the chassis. Take the motor to worksite.
- 8. Lift the chassis by grasping the front handle and rear of chassis. Bring the belt guard against your chest. Take the chassis to worksite.



1. Loosen off belt tension.



2. Release belt guard.



3. Remove drive belts.



4. Slide out motor pins.

# TO ASSEMBLE THE MACHINE AFTER TRANSPORTING, FOLLOW THIS PROCEDURE:

- 1. Align motor release pins as shown. (Figure 5)
- 2. Place the motor on the chassis.
- 3. Push in the motor release pins. Tighten the motor release screws.
- 4. Install the drive belts. (Figure 6) Line up drive belts as shown. (Figure 7)
- 5. Tighten the T-screw until the correct drive belt tension is achieved. (Figure 8)
- **Note:** Tighten the T-screw until the drum drive belt experiences a 1/2" deflection at the mid-span when 10 lbs of pressure is exerted upon it with your thumb.
- CAUTION: Premature bearing failure can occur if the drum belt is set too tight. The drum belt should deflect no less than 1/2" at 10 lbs.
- **Note:** It is <u>not</u> necessary to adjust the fan belt independently during this procedure or during replacement. The idler pulley is factory adjusted.
- 6. Close the beltguard door.
- 7. Plug the motor pigtail in, twisting to lock.

#### Transporting the Machine – Two People

When transporting the machine with two people follow this procedure:

- 1. One person lifts the machine by the rear carriage.
- 2. Person #2 lifts the machine by the carrying handles.



5. Make sure pins are pulled out before installing the motor.



6. Install drive pulleys.



7. Line up drive belts as shown.



8. Tighten T-screw.

### ADJUSTING THE HEIGHT OF THE DRUM

The drum height is factory set for general use. If you wish to change the drum height follow this procedure:

- 1. Pull out the cotter pin. (Figure 9)
- 2. Using the 9/16 wrench, loosen the nut on the cotrol arm. The nut is just below the yoke.
- 3. Remove the clevis pin.
- 4. By turning the yoke counterclockwise the drum is raised. Turning the yoke clockwise lowers the drum,

### PRESSURE SPRING ADJUSTMENT

#### Adding Pressure.

The drum pressure spring is factory set for minimum pressure. (Figure 10) To adjust the pressure follow this procedure:

1. For a more aggressive cut, raise the lever that is attached to the drum pressure spring up one notch.

#### Note:

Only adjust the pressure when a difficult cutting situation is present. Painted floors, etc.

#### **Reducing Pressure.**

For a very light cut, the pressure can be reduced. (Figure 11) To reduce the pressure, follow this procedure:

1. Pulling the pressure release spring up will reduce pressure on the drum and give the lightest cut.

Light pressure is especially helpful when working on veneers, parquet or herringbone. Although, too light a pressure can result in chatter marks.

2. Moving the spring down will increase the pressure on the drum.



9. Remove clevis pin.



10. Raise for added pressure.



11. Factory setting - no pressure.

### SANDING CUTS AND SANDPAPER

Grit	Use
16 grit	For removing gross imperfections and restoring evenness to old flooring. To remove build-up of paints and varnishes.
36 grit	For first sanding of new flooring (maple, oak). For removing minor imperfec- tions and finishes from old flooring.
40 grit	For first sanding of new flooring (oak, walnut). For removing minor imper- fections and finishes from old flooring.
50 grit	For first sanding of new flooring (cedar, pine, fir, ash). For clean-up of 16 grit. For clean-up from initial cut 36-40 grit.
60 grit	For clean-up from initial cut 36-40 grit. For first sanding of prefinished flooring.
80 grit	For final sanding of certain hardwoods. For clean-up of initial cuts 50 grit). For first sanding of prefinished flooring.
100 grit	For final sanding of certain hardwoods where a smooth surface is desired.
120 grit	For final sanding of certain conifers.

### USING THE 2000 PLUS AS A DRUM SANDER (Galaxy 2000 Plus only)

#### SELECTING AND CUTTING THE SANDPAPER

- 1. Select the proper grit of sandpaper.
- 2. Place the supplied template on the roll. (Figure 12).
- 3. Tear the exact measure of the template off the roll as shown. (Figure 13)
- 4. Slide the template back on the cut portion of sandpaper and fold over so that the paper lines up just inside the notch on the template. (Figure 14)
- 5. For the fold on the other end, repeat the process.
- 6. Remove the excess paper caused by the angle cut and fold the paper back.(Figure 15)



12. Use supplied template.



13. Tear off exact measure.



14. Locate notch and fold to notch.

#### NOTE:

Always make sure the paper is cut to the correct length. Always use the supplied template when cutting a length of sandpaper.

#### PREPARING TO INSTALL THE SANDPAPER ON THE DRUM

# MAKE SURE THE MACHINE IS TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE.

- 1. The control handle must be in the UP position to raise the drum off the surface.
- 2. Open drum side cover and remove the front drum cover. (Figure 15)
- 3. Loosen paper tighteners and remove balancing wedges. (Figure 16)



15. Open drum side cover and remove the front drum cover.

#### Note:

Do **Not** discard the balancing wedges. They will be needed to take up slack in the paper tighteners and to balance the drum when using the Super Galaxy 2000 Plus as a belt sander.

Balancing wedges are used to take up extra space In the paper tighteners when using finer papers.

Paper tighteners are engineered to accept 34 and 24 grit sandpaper.

When using 16 or 12 grit sandpaper, the grit has to be scraped to remove some of the grit thickness. Doing this will allow the sandpaper to fit into the paper tighteners.



16. Remove balancing wedges.

### INSTALLING THE SANDPAPER ON THE DRUM (2000 only)

- 1. With the balancing wedges removed and the paper tighteners released, insert the sandpaper into the drum slot.
- 2. Turn the drum by hand so that the paper rolls around the top of the sanding drum. (Figure 17)
- 3. When the paper is completely on the drum, remove the bottom fold from the drum slot and insert the top fold first.
- 4. Insert the bottom fold into the drum slot and insert the necessary wedges to take up the slack in the paper tighteners. (Figure 18)

#### NOTE:

The drum is manufactured to accomodate coarse sandpaper. When using finer paper, wedges must be inserted into the drum slot to ensure the paper tighteners lock firmly in place and hold the paper securely.

5. Before tightening the paper on the drum, the paper should be pulled out 1/4" at the top and bottom fold.

#### NOTE:

The paper will break when tightened if not pulled out of the drum slot 1/4". Lift paper 1/4" off the drum on both sides. Make certain the top and bottom folds are loosened. Allow paper tighteneres to pull the paper firmly into position.

When using wedges to take up additional space in the paper tighteners, be certain the tighteners lock in position and do not turn back. Even the slightest turn back of the paper tighteners will loosen the paper. (Figure 19)

- 6. The paper is properly installed (Figure 20) when:
  - A) The paper is lined up on the drum.
  - B) Wedges are inserted.
  - C) Paper is loosened at folds 1/4" before tightening.
  - D) Paper is tightened until it touches the surface of the drum.

#### NOTE:

Overtightening the sandpaper causes the drum circumference to change and causes chatter marks, and/or the paper to snap off the drum.



17. Line up paper with drum edges.



18. Insert required wedges.



19. Tighten firmly.



20. Properly installed.

### USING YOUR GALAXY AS A BELT SANDER

#### **INSTALLING BELT SANDPAPER**

- Disengage the tension on the belt mechanism. (Figure 21) The control handle should be placed in the UP position to raise the drum off the floor. (Figure 22)
- 2. Release the side door latch to gain entry to the drum housing. (Figure 23)
- 3. Raise the the sanding belt tension release handle until it locks. Install a new abrasive material.
- Once the sanding belt is centered on the drum, lower the tension control lever and spin drum by hand to set the sanding belt on its proper track. (Figure 24)
- 5. Close the drum side door. Secure the door with the latch.
- 6. Turn on the motor momentarily.
- 7. Observe the belt tracking. If the sanding belt requires adjustment, follow the procedures outlined in the "Belt Tracking Adjustment" to correct the belt tracking.



21. Disengage tension belt mechanism.



22. Lever in up position.



23. Slide belt into position.



24. Set sanding belt on proper track.

### BELT TRACKING ADJUSTMENT

### To adjust the belt tracking, follow this procedure:

- 1. Locate the belt tracking adjustment screw. (Figure 25)
- Using the key provided, turn the belt tracking adjustment screw in the desired direction. (Figure 26)

Turning the adjustment screw clockwise will move the sanding belt towards the drive pulley side of the machine.

Turning the adjustment screw counterclockwise will move the sanding belt away from the drive pulley side of the machine.

3. After adjusting, turn the drum and belt manually to check the belt tracking. When the belt is tracking correctly, with the drum raised off the floor, start the machine.

Minor tracking adjustments can be made with the drum raised and the machine running.



25. Locate belt tracking adjustment screw.



26. Turn adjustment screw as required.

### **MACHINE SET-UP**

### To set up your machine, follow this procedure:

- Familiarize yourself with the machine and read all danger, warning and caution statements. Make sure all operators of this machine have read this Operator's Manual. If they cannot read English, have the manual explained fully before allowing anyone to operate the sander.
- 2. Locate the power supply. The receptacle should be compatible with the plug. The receptacle must be grounded and must be fused (30 amp) to avoid an electrical hazard.
- 3. Slide the dust bag over the flare on the elbow. Using the dust bag clamp or draw string, secure the dust bag to the elbow. (Figure 27)
- 4. Pass the power cord through the cable support arm. Keep the power cord out of the path of the sander. (Figure 28)
- 5. Release the side door latch to gain entry to the drum housing.
- 6. Raise the sanding belt tension release handle until it locks. (Figure 29)
- 7. Install new abrasive material.
- 8. Lower the sanding belt tension release handle to tighten the abrasive belt
- 9. Plug the power cord into the motor pig-tail. Twist the power cord connection to lock.
- 10. Close the drum side door. Secure the door with the latch.
- 11. Turn on the motor momentarily.
- 12. Observe the belt tracking. If the sanding belt requires adjustment, follow the procedures outlined in the "Belt Tracking Adjustment" to correct belt tracking.



27. Secure dust bag on elbow.



28. Keep power cord out of the path of sander.



29. Raise tension release handle.

### HOW TO OPERATE THE FLOOR SANDER

Danger: Serious damage can occur to the floor surface if the machine is not in motion while the contact wheel is running on the floor surface. To prevent damage to the surface, make sure the machine is always moving when the contact wheel is in contact with the floor.

#### To operate the machine, follow this procedure:

- 1. Put the On/Off switch into the "ON" position.
- 2. Work left to right. For each forward pass, move the machine 4" over the pass you have just finished. Retrace your reverse path without overlapping.
- 3. Feather-cut in by using the control lever to ease the drum down onto the surface while the sander is in motion.
- 4. When drum is fully engaged with the surface, gradually adjust your pace for adequate finish removal. Keep sander in motion while drum is engaged with the surface or dwell marks will occur.
- 5. Move the machine in the direction of the wood grain whenever possible. Sand the surface at a constant pace.
- 6. Gradually feather-cut out the termination point (the end of your pass) by easing the drum up with the control lever. Stagger the termination points for a better blend when edging.
- Empty dust bag whenever it is 1/2 full. NEVER leave a dust bag unattended with sanding dust in it. Sanding dust can spontaneously ignite and cause a fire or explosion.
   Empty dust into a metal container located outside of the building.

### JOB COMPLETION

- 1. Raise drum off the surface before stopping the machine.
- 2. Turn off the machine.
- 3. Disconnect Power Supply.
- 4. Empty the dust bag. NEVER leave any debris in the dust bag.
- 5. Prepare the machine for transport.

### ADJUSTING THE FRONT WHEELS

#### **IMPORTANT NOTES:**

The front wheels are factory set with the drum at a neutral position.

To adjust the front wheels, follow this procedure:

- Determine the cutting pattern of the drum by checking its sanding print on a smooth flat surface. (Figure 30)
- 2. Gently tip machine over onto its guard belt cover.
- 3. Using a non-permanent marking device, align a reference mark with the slot in the wheel shaft.
- 4. Using an open-ended 3/4" wrench, loosen the right wheel shaft nut. (Figure 31)
- 5. Using a straight screwdriver, turn the offset shaft in small increments in the desired direction.

#### NOTE:

The head of the wheel shaft is engraved with "H" and "L". (Figure 32)

Adjusting "H" to the bottom will raise that side of the machine.

Adjusting "L" to the bottom will lower that side of the machine.

Both wheels are adjustable

- 6. Tighten up the wheel shaft nut.
- 7. Recheck sanding print for the desired cutting pattern.



30. Check sanding print.



31. Loosen shaft nut.



32. Adjust wheels.

### TROUBLESHOOTING

### Problem

Machine will not start.

Machine makes noise.

Machine vibrating.

Poor dust pickup.

Motor starts but has no torque.

### Action

- 1. Check the power supply.
- 2. Check the power cords.
- 3. Check the On/Off switch.
- 4. Check for loose connections.
- 5. Call your distributor or Galaxy.
- 1. Check the power supply and make sure it's 208 240 volts.
- 2. Check the drive belts for proper tension.
- 3. Check for loose connections.
- 4. Check for seized fan or drum bearings.
- 5. Check the running capacitor.

#### Note:

If voltage is low, ease up on the pressure. When using extra power lines use #8 wire.

- 1. Check the fan bearing. Remove drum belt and run fan only.
- 2. Check the drum bearing. Remove fan belt and run drum only.
- Check the motor bearing. Remove fan and drum belts and run motor only.
- 1. Check drum drive belt for wear.
- 2. Check fan drive belt for wear.
- 3. Check pulleys for wear.
- 4. Check top roller of belt mechanism for debris or worn bearings.
- 5. Check for dust accumulation in and on the drum.
- 6. Check the sanding belts. Make sure there are no creases in the paper. Use good quality sandpaper.
- 7. Check if balancing wedges are installed for belt mode (2000 Plus & BD 12 only)
- 1. Check belt tension on fan pulley.
- 2. Check that the idler arm moves freely.
- 3. Check the spring tension on the idler arm.
- 4. Remove, clean out cover, and check for debris or broken sandpaper in the fan housing.
- 5. Remove dust bag, empty, shake, and turn inside out and shake. Dust accumulates in the pores of the dust bag. Wash the bag regularly.

### **TROUBLESHOOTING continued**

### Problem

**Gouges**& Waves

### Action

1.

- 1. Check for debris accumulation on the front and back wheels.
- 2. When operating the floor sander maintain a steady, even, walking pace. Do not jerk or suddenly pull the machine.
- 3. When sanding the floor on its return path, retain the same speed as the forward motion. This will allow the floor sander to smooth the floor.
- 4. Check sanding bag for overfill. An overfilled sanding bag can cause the machine to become tippy or unstable .
- 5. Replace drive belts
- 6. Reduce sanding pressure
- 7. Use Y weight sanding belts to reduce undercuts in the soft grain.
- 8. Check wheel bearings.

- Lines uneven cuts or deep cuts at the side of the drum.
- front wheels
   Check sanding belt tracking. Watch for sanding

Check the machine for a level cut. Adjust the

- belt shift.
   Check sandpaper for nail cuts or burn marks.
- Replace paper. Always use good quality paper. Extremely uneven floor. Cut floor on a 45 angle.
- 1. Check for dust accumulation on the drum.
- 2. Check the quality of the sanding belts.
- 3. Check drum drive belt for uneven stretch.
- 4. Check that the sanding belt is properly installed.
- 5. Insufficient drum pressure. Check feathering spring for over-extension.
- 6. Check for debris build-up on top rollers.

Chatter marks.

### **ROUTINE MAINTENANCE**

The following items need to be periodically inspected and maintained to keep your sander in good working condition:

### **Drum Housing**

Periodically blow out the dust from the drum housing to prevent large accumulations of debris, which could interfere with the performance of the tension roller.

#### Wheels

Periodically remove the debris from the front and rear wheels. Debris can cause an uneven cut.

### Dust Bag

Remove the dust bag from the machine and shake it thoroughly to remove the sanding dust from the dust bag. Machine-wash the dust bag inside out in cold water to prevent pore blockage and loss of dust recovery.

#### **Drive Belt**

Periodically check the drive belt tension.

### Bearings

Periodically check the bearings for wear or damage.

### Rollers

Periodically check the guide rollers and the tension roller for wear.

#### Motor

Periodically blow out the dust from the motor to prevent large accumulations of dust, which could interfere with the performance of the motor.

### MAINTENANCE

#### Note:

Check for debris on the top sanding belt roller and clean periodically.

- 1. Raise the belt tension lever. (Figure 33)
- 2. Open the side drum cover and lift up on the centre of the top roller mechanism. (Figure 34)
- Remove. Clean top roller of any dust or debris. Clean centre shaft. Check side roller bearings for wear. (Figure 35)
- 4. Re-install.

#### Note:

The top sanding belt roller mechanism should be inspected for debris before beginning a sanding session.

Dust and debris can make the roller difficult to adjust.



33. Raise belt tension lever.



34. Remove roller mechanism.



35. Clean thoroughly.

### **MAINTENANCE** continued

#### Note:

One grease fitting is used to grease both sides of the fulcrum shaft.

- 1. Grease the side of the machine with the grease fitting. (Figure 36) One pump is sufficient.
- 2. Remove the grease fitting and use it to grease the other side of the machine. Remove the grease cap and install the fitting. (Figure 37)
- 3. Grease. One pump is sufficient.
- 4. Remove fitting and re-install grease cap.
- 5. Re-install grease fitting in its original location.

#### Note:

Always re-install the grease fitting to its original location. This will maintain a smooth edge to the machine for getting in close to walls.

#### VACUUM:

When dust pickup is weak or reduced, check the idler arm assembly. (Figure 38)

1. Clean the idler arm until it moves freely.

The idler arm determines the tension on the fan drive belt and vacuum fan speed. Dust and debris can inhibit performance.



36. Grease nipple.



37. Remove grease cap and install grease fitting.



38. Idler arm assembly.

#### VACUUM:

The clean out cover should be removed regularly so that the buildup of debris can be removed, as shown. (Figure 39).

Accumulated debris reduces dust pickup.

Check this area whenever dust pickup is reduced.

#### **DUST PIPE ELBOW:**

#### Note:

Do not remove dust pipe elbow with a filled dust bag attached.

- 1. Remove the dust bag from the dust elbow.
- 2. Remove the dust elbow to check for dust accumulation between the seals. (Figure 40)
- 3. Re-attach dust elbow.



39. Use the key provided to remove dust cover.



40. Clean out dust accumulation between the seals.

### SECTION THREE

**Machine Schematics** 

### GET TO KNOW YOUR GALAXY. MACHINE SCHEMATICS

- A. Frame Assembly
- B. Fan Assembly
- C. Drum Housing & Drum Covers
- D. Drum Assembly
- E. Dust Pipe and Elbow Assembly
- F. Drive Belt and Cover
- G. Control Lever and Spring Adjustment
- H. Wheel Carriage Assembly
- I. Rear Wheel Assembly
- J. Sanding Belt Guide Mechanism
- K. Motor Assembly
- L. Electrical
- M. Handles, Power Cord & Tools



#### Section A - Frame Assembly

- Wrench 7/16" Forged Steel 2 (2000 only) 2
- 13. Screw - 5/16" x 1/4" - set - 1
- Key 5/32" Allen 1 23.
- Pin Motor Release 2 24
- Key 1/4" Allen 1 36.
- 53. Shaft - Fulcrum - 2
- 73. Cover - Clean Out - 1

- 76. Screw 3/8" - 16 x 1/2" - set - 2
- 83 Screw 5/16" - 18 x 3/4" - set - 2
- 96. Pin - Cotter 3/32" x 3/4" - 1
- 101. Pin 1
- 105. Screw - 5/16" - 18 x 3/8" Thumb - 2
- 214. Frame - 1
- 261. Pan Dust 1

#### Section B - Fan Assembly

- 55. Bearing - Ball 6202 2RS1 - 3
- Washer Shakeproof 2 61.
- 64 Nut - 3/8" - 24 Hex Jam - 1
- Screw 1/4" 20 x 5/8" Soc. Cap. 4 104.
- Nut 1/2" 20 x 3/16" Hex Jam Special 2 107.
- 108. Fan - Vacuum - 1
- Key 1/8" x 1/2" Woodruff 2 109
- Seal Dust 19 x 35 x 7 1 110.
- 111. Collar - Fan - 1

51.

127.

201.

202.

203.

204.

205.

206.

207.

208.

- 112. Housing Fan 1
- 112C. Housing Fan Complete

Block Assembly - 1

Nut 6 - 32 Lock - 2

Handle - Lifting - 1

Hinge - Torpedo - 2

Cover - Drum Front - 1

Cover - Drum Side - 1

Nut 10- 32 Hex Locking - 8

Pin - Spring 1/4" x 1" - 2

Housing - Drum 2000 - 1

Spring - Idler Arm - 1 113.

- 117. Washer - Flat #10 - 1
- Screw #8 32 x 1/2" F.H. Machined 3 121.
- 138. Washer #1120 Shakeproof 1
- 141. Shaft Fan 1
- 142. Arm - Idler - 1
- 143. Spacer - Idler - 1
- 144. Pulley - Idler - 1
- 145. Shaft - Idler Pulley - 1
- Cover Retaining 1 149.
- Pulley Fan 1 152.
- 162. Ring - Retaining - 2
- Screw 10-32 x 3/8" R.H. 1 170.

#### Section C - Housing - Drum

- 253. Washer - Lock - 2
- Bumper Drum Front Cover 1 256.
- Screw 6 32 x 5/8" R.H. 2 258.
- 259. Screw - 6 - 32 - 1" R.H. - 2
- 260. Screw - 10 - 32 - 3/4 F.H. - 8
- Nut 5/16" 7/8 Hex. 2 262.
- 268. Screw 1/4 - 20 x 3/4 Flat Soc. Cap - 2
- 269. Bumper Screw 10 - 32 x 1 Steel Pan Phillips - 3
- 270. Brass Rivet - SE8-4 - 3
- 290. Housing - Drum Omega - 1

#### Section D - Drum Assembly

- 28. Bearing - Drum 6205-2RSH - 3
- Drum 2000 Plus 1 209.
- 210. Tighteners - Sandpaper - 2
- 211. Nut - R.H. 24 - 1.5 - 1
- 212. Shaft - Drum - 1

Latch - 1

- 213. Pulley - Drum - 1
- Key Drum Pulley 6x6x20mm 1
- Key Drum 6 x 6 x 15mm 1 216.

Spacer - Bearing Short - 1 217. Nut - L.H. 24 mm - 1.5 - 1 218. 219 Housing - Drum Cylinder - 1 222. Ring - Retainer - 1 244. Spacer - Drum Lomg - 1 257. Seal - Dust 35 x 52 x 7 - 1 289. Drum - Omega - 1

#### Section E- Dust Pipe and Elbow Assembly

Seal - Elbow - 2 Elbow - Swivel - 1 79. Screw - 3/8" - 16 x 1-1/4" Soc. Cap - 1 Pipe - Dust - 1 103 Bracket - Dust - 1 104. Screw - 1/4" - 20 x 5/8" Soc. Cap - 4

#### Section F - Drive Belt and Cover

86. Screw 1/4 - 24 x 3/4 Flat Soc. Cap - 1 151. Belt - Drum - 1 Screw 8-32 x 1/2 Pan- 2 154. Pin - 3/16 x 1 1/2 - 2 126. 146. Shaft - Guard Holder - 1 254. Guard - Belt 2000 - 1 Clip - Guard Holder - 1 148. 288. Guard - Belt Omega - 1 150. Belt - Fan - 1

- 72.
- 75.
- 215.
- 71.



#### Section G - Control Lever and Spring Adjustments

- 64. Nut 3/8" 24 Hex Jam 1
- 68. Rod Cable Support 1
- 69. Bracket Cable Support Assembly 1
- 82. Washer Shakeproof 1
- 86. Screw #10 24 x 1/2" Soc. Cap. H.D. 5
- 87. Plate Pressure Control Ratchet 1
- 88. Chassis Upper Truck 1
- 89. Screw 1/4" 20 x 3/4" Soc. Cap. 4
- 92. Handle Control 1
- 93. Handle Feathering 1
- 95. Stud Control Handle 1
- 96. Pin Cotter 3/32" x 3/4" 1
- 97. Pin Clevis 1
- 98. Yoke Control Handle Rod 1
- 99. Nut 3/8" 16 x 5/16" Hex 1
- 100. Rod Control Handle 1

- 115. Tube Handle 1 116. Screw - 3/8" - 16 x 2-1/2" Soc. Cap. - 3 117. Washer - Flat #10 - 1 118. Screw 5/16" - 18 x 1-1/4" Soc. Cap. - 2 119. Lever - Pressure Control - 1 120. Bracket - Pressure Lever - 1 123. Plate - Spring Adjuster - 1 132. Nut - 5/16" - 18 Hex - 1 133. Stud - 3/8" Shoulder Soc. Cap. - 1 134. Spring - Pressure Control - 1 136. Bracket - Handle - 1 137. Handle - Grip Washer - Shakeproof #1120 - 12 138.
- 139. Spring Buffing 1
- 268. Screw 1/4" 20 x 3/4" 1

Ring - Retaining - 4

Bearing - 6003 2RS - 4

Shaft - Front Wheel - 2

Spacer - Wheel Long - 2

Spacer - Wheel Short- 2

#### Section H - Wheel Carriage Assembly

162.

264.

265.

266.

267.

- 56. Wheel Front 2
- 61. Washer Shakeproof 2
- 62. Nut 1/2" 20 Hex Jam 2
- 90. Bearing Needle M-12121 2
- 91. Chassis Lower Truck 1

#### Section I - Rear Wheel Assembly

- 61. Washer Shakeproof 1
- 62. Nut 1/2" 20 Hex Jam 1
- 65. Shaft Caster Wheel 1
- 67. Sleeve Caster Wheel 1
- 85. Washer 7/8 Shakeproof 1
- 121. Screw #8 32 x 1/2" F.H. Machined 3
- 122. Cover Caster Yoke 1
- 124. Collar Short 1
- 125. Collar Long 1

- 129. Yoke 1
- 129C. Yoke Assembly
- 130. Spacer Caster Collar 2
- 131. Wheel Caster 1
- 132. Nut 5/16" 18 Hex 1
- 162. Ring Retaining 2
- 238. Bearing 6202 2RS 4
- 255. Shaft Swivel 1



- 52. Bearing Ball 6202 2RC/C3 2
- 86. Screw 10 24 x 1/2" Soc. Cap. 2
- 128. Ring Retaining 15mm 3
- 224. Bracket Tension Spring 1
- 225. Spring Tension 1
- 226. Seal Dust TCM0111VM 3
- 227. Bushing Sleeve 1
- 228. Arm Tension Support 1
- 228C. Arm Assembly Complete. (Incl. 226, 227, 228, 239, 240)
- 229. Plate Support Mechanism 1
  229C. Lower Support Mechanism Complete (Incl. 86, 128, 224, 225, 228C, 229, 230, 231, 232, 234, 235, 236, 237, 240, 263, 268)
- 230. Screw 5/16" x 3/8" Shoulder 2
- 231. Lever Release 1
- 232. Screw Sec 1/4" x 1/4" 1
- 234. Knob Lever 1
- 235. Bearing Needle SCE 1010 1
- 236. Ring Retaining 5/8" 1
- 237. Shaft Roller Release Guide 1

- 238. Bearing 6202 2RS 1
- 239. Bushing Sleeve 1
- 240. Housing Adjusting Cylinder 1(Incl. 226, 227)
- 241. Nut 1/4" 28 Hex. Jam 2
- 242. Washer Lock 1/4" 2
- 243. Bracket Tension Roller 1
- 243C. Bracket Upper Roller Complete (Incl. 52, 128, 247C, 248C, 251, 252)
- 245 Shaft Tension Roller 1
- 246. Screw 1/4" 28 x 1 3/4" Soc. Cap -2
- 247. Roller Tension 1
- 247C. Roller Tension Complete (Incl. 52, 128, 245, 246, 247)
- 248. Roller Sandpaper Guide 2
- 248C. Guide Roller Sandpaper Complete (Incl. 248, 249, 250)
- 249. Bearing 607-2RS1 4
- 250. Shaft Sandpaper Guide Roller 2
- 251. Washer Lock 2
- 252. Nut 6mm Hex. Jam 2
- 263. Screw 5/16" 24 x 2" Soc. Cap. 1
- 268. Screw 1/4" 24 x 3/4" Flat Soc Cap 4



- 04. Plug Male 30Amp 1
- 08. Fan Cooling 1
- 09. Cover Capacitor Assembly -1
- 10. Screw Motor Adjust 1
- 11. Bearing 6206 2RS1/C3 1
- 12. Housing Motor Assembly 1
- 12C. Motor Assembly Complete
- 16. Insulator
- 19. Bracket Capacitor 1
- 28. Bearing 6205 2RSH 1
- 29. Switch Sinpac 1
- 30. Capacitor Starting 1
- 32. Capacitor Running 1
- 35. Rotor Assembly 1
- 37. Shield Fan 1
- 40. Screw -
- 41. Insulator

- 47. Plate Motor Release Pin Guide 2
- 59. Cover Bolt 1
- 60. Key 1/4" x 1-1/2" 1
- 74. Bell End Front 1
- 74B. Bell End Back 1
- 76 Screw Set 3/8 16 x 1/2 1
- 77. Pulley Motor 1
- 86. Screw #10 2
- 163. Switch On/Off 1
- 164. Box Switch Top 1
- 164B. Box Switch Bottom 1
- 165. Screw 8/32 x 1" F.H. Machined 4
- 166. Cord Pig Tail 1
- 167. Retainer Cord 1
- 168. Washer Spring 1
- 169. Nut Flange 1/4" 20 3
- 174. Bolt Motor 4

### **ELECTRICAL** SECTION L



30. Capacitor - Starting 218MF

163. Switch - On/Off.

### CARRYING HANDLES & POWER CORD SECTION M



- 1. Carrying Handle Straight 1
- 1B. Carrying Handle Bent 1
- 3. Plug Female 30Amp 1
- 4. Plug Male 30Amp 1
- 5. Grip Carrying Handle 2

- 6. Clamp Dust Bag 1
- 22. Template Paper Cutting (2000 ONLY) 1
- 140. Dust Bag 1
- 156. 100' Power Cord 1

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