TO THE OWNER

This Lit’l Shakee machine is shipped complete and ready to use. Follow the pre-operation checklists and instructions before use.

Read this manual before using your Lit’l Shakee Christmas Tree Shaker, Model V200E. The information presented will prepare you to do a better, safer job. Keep this manual handy for ready reference.

The Shaker you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Observe all safety information in this manual and safety decals on the Shaker.

Use only genuine Shakee service parts. Substitute parts will void the warranty and may not meet standards require for safe and satisfactory operation.

Throughout this manual, the term IMPORTANT is used to indicate that failure to observe can cause damage to equipment. The terms CAUTION, WARNING, and DANGER are used in conjunction with the Safety-Alert symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety.

A Safety-Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

⚠️ CAUTION:
Denotes a general reminder for good safety practices or to direct attention to unsafe practices.

⚠️ WARNING:
Denotes a specific potential hazard.

⚠️ DANGER:
Denotes the most serious specific potential hazard.

<table>
<thead>
<tr>
<th>MACHINE REVISIONS</th>
<th>Serial Number</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100-1999</td>
<td>05/1992</td>
<td>First Production Units</td>
</tr>
<tr>
<td></td>
<td>2000 + Up</td>
<td>05/1993</td>
<td>Relocate Foot Switch to Cone End</td>
</tr>
<tr>
<td></td>
<td></td>
<td>05/1993</td>
<td>Add Lip to Cone for Cone Rubber Slinger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>05/1997</td>
<td>Air Switch Conversion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>05/2010</td>
<td>Heavy-duty Foot Pedal replace Foot Bulb</td>
</tr>
</tbody>
</table>
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SPECIFICATIONS

APPROXIMATE SIZE:
Length: 24.0"
Width: 14.0"
Height: 17.0"
Weight: 115 lbs.

SPECIFICATIONS:
3/4 HP TEFC ‘Farm Duty’ electric motor, heavy duty ball bearings, 110 volt single phase, 15
amp/min, 1750 rpm motor, 5/8" diameter shaft, 865 rpm operating speed, 7" cone standard.
SAFETY DECALS

Replace Immediately if Damaged!

DANGER
KEEP AWAY! - NO RIDERS
* ENTANGLEMENT WITH ROTATING DRIVE PARTS OR FALLING OFF CAN CAUSE INJURY OR DEATH.
* KEEP ALL DRIVE SHIELDS & GUARDS IN PLACE & IN GOOD CONDITION.

WARNING
TO AVOID SERIOUS INJURY OR DEATH
○ READ OPERATORS MANUAL BEFORE OPERATING OR SERVICING.
○ ALLOW NO CHILDREN OR UNQUALIFIED PERSONS TO OPERATE.
○ DISCONNECT POWER BEFORE SERVICING.
○ USE ONLY GROUNDED 110 VOLT OUTDOOR, ELECTRIC SUPPLY OF 14 GA. MIN. WIRE 25 FOOT MAX. LENGTH.
○ KEEP POWER CORD FROM UNDER MACHINE AND PREVENT MACHINE FROM TURNING. ANCHOR MACHINE AS REQUIRED.
○ MOTOR IS EQUIPPED WITH AN AUTOMATIC RESET. IF THE MOTOR STOPS DUE TO OVER LOAD IT WILL RESTART WITHOUT WARNING.
○ OPERATE ONLY WITH ALL 3 PRONGS ON ELECTRIC PLUGS.
○ OPERATE ONLY WITH COVER AND RUBBER FLINGER BELT IN PLACE AND IN GOOD CONDITION.
OPERATIONAL SAFETY INFORMATION

CAUTION

IN ADDITION TO THE DESIGN AND CONFIGURATION OF EQUIPMENT, HAZARD CONTROL AND ACCIDENT PREVENTION ARE DEPENDENT UPON THE AWARENESS, CONCERN, PRUDENCE AND PROPER TRAINING OF PERSONNEL INVOLVED IN THE OPERATION, TRANSPORT, MAINTENANCE AND STORAGE OF EQUIPMENT.

Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Failure to do so could result in serious injury. Wear sturdy work shoes.

Never use drugs or alcoholic beverages which can hinder alertness or coordination while operating. Consult your doctor about operating this machine while taking prescription drugs.

Replace any safety decals immediately if damaged. Clean area for decal with soap and water. Remove any dirt, grease or remnants of old decal. Re-apply pressure sensitive decal in same location.

Read and observe all safety decals on the shaker.

Never allow children or bystanders near the machine while in operation.

Take all possible precautions when leaving shaker unattended. Unplug shaker from power source.

Use only heavy duty, grounded outdoor type, 3-prong extension cord rated for at least 15 amps on 110 volt, single phase power.

Keep all hardware tight.

Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

To reduce fire hazard and allow proper cooling of drive, keep the shaker free of grass, needles, leaves or excessive grease.

Always wear protective eye goggles.

Keep Cone Rubber Slinger pushed up tight under rim of cone with rough side up.

During transport, be alert for holes in terrain and other hidden hazards. Always drive slowly over rough ground.

Disengage power to shaker and stop motor before making any repairs or adjustments.

Keep the shaker in good operating condition, and keep all safety devices in place.
GENERAL INFORMATION

The purpose of this manual is to assist the operator in maintaining and operating the Shakee Christmas Tree Shaker. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance. These operating and maintenance instructions have been compiled from extensive field experience and engineering data. However, through experience and these instructions, you should be able to develop operating procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing. But due to possible inline production changes, your machine may vary slightly in detail. Shakee reserves the right to design and change the machine as may be necessary without notification.

Shakee parts are available by contacting your local distributor or RES Equipment at 503.634.2242.

BASIC MAINTENANCE

Keep shaker free of grass, pine needles, leaves or excessive grease to reduce fire hazard and allow proper cooling of internal drive parts. Do not change operating rpm on the Lit’l Shakee.

Keep shaker in good operating condition and keep all safety devices in place. Periodically tighten all bolts, nuts and screws to insure that the shaker is in good condition. Inspect all electrical connections and cords. Replace and repair any damaged or missing parts before use.

STORAGE

- Clean all foreign materials from underneath the shaker frame.
- Sand all areas where paint has chipped and repaint to prevent rust.
- Safety decals must be replaced immediately if damaged.
- Store indoors in a dry location.

TRAINING

- Know your controls and READ the operators manual provided with your machine.
- Learn how to stop the Shakee motor quickly in case of an emergency.
- Do not allow children to operate the machine or adults to operate it without proper instructions.
- Never allow anyone to sit on shaker.

PREPARATION

- Keep area around shaker open and free of debris and needles.
- Insure machine is properly adjusted and in good operating condition.
- Insure all safety shielding is properly installed.
- Cone Rubber Slinger must be pushed up under rim of cone with rough side up.
- Replace and repair any damaged or missing parts before use.
ASSEMBLY INSTRUCTIONS

This Lit’l Shakee machine is shipped complete and ready to use. Follow the pre-operation checklist and read all instructions before use.

Due to the quality and simple design of the Shakee Christmas Tree Shakers, minimal servicing and upkeep is required.

Refer to parts lists and drawings and instructions in this manual to replace, repair, or adjust this machine.

PRE-OPERATION CHECKLIST

Check off each item as it is found satisfactory or after proper adjustment is made.

- Be sure all users of this machine have read this manual and understand how to operate this machine safely.

- Check all bolts to be sure that they are tight. See Maintenance Instructions.

- Be sure the electric motor, pulleys, and belt are all properly installed, aligned and tightened properly.

- Check belts for wear and replace if necessary.

- Be sure Cone Rubber Slinger is in place and securely snapped up under the lip of the cone. NEVER OPERATE MACHINE WITHOUT SLINGER IN PLACE.

- Be sure only a heavy duty, grounded outdoor type, 3 prong extension cord is used on 110 volt single phase.

- Wear protective clothing and eye protection

- Be sure when shaking heavy trees that proper provision is used to prevent the shaker from tipping. See Operating Instructions.

- The area around shaker should be open and free of debris and needles.
OPERATING INSTRUCTIONS

⚠️ WARNING:

KEEP ALL SHIELDS IN PLACE AND IN GOOD CONDITION. WEAR PROTECTIVE CLOTHING AND EYE PROTECTION.

⚠️ WARNING:

THE ELECTRIC MOTOR ON THE SHAKER MAY BE EQUIPPED WITH AN AUTOMATIC RESET. IF THE MOTOR STOPS DUE TO OVERLOAD IT WILL RESTART WITHOUT WARNING IF IT IS AUTOMATIC. IF NOT, YOU MUST REMOVE THE COVER AND PRESS THE RESET BUTTON.

When shaking trees that are very cold, care should be taken to prevent damage to the very top or tip of the tree. The shaking action may damage or break the leader or top whorl if not careful.

Holding the tree approximately ¾ of the way up is usually best.

Place butt end of Christmas tree into cone of tree shaker (if your shaker is equipped with optional tree holder, lean the Christmas tree into the tree holder).

Turn on the switch with your foot. Allow the tree to shake approximately 10-15 seconds or as required.

If the tree jumps around in the cone, the angle of the tree is not straight up. Angling the tree in the cone to one side to cause some jumping will sometimes improve results.

Decreasing the angle of the tree relative to the cone reduces the amount of shaking action.

Testing the different positions will give you the specific action and results you require for your application.

The butt of the tree must be long enough to rest in the cone before the low branches interfere with the top of the cone. Otherwise, it will bounce around in the cone and not shake well. A butt of approximately this length is usually required to fit in most tree stands.

By experimenting with where you hold a tree, either farther out or closer to the butt, you can determine what gives the best results.

It may be desirable to lean the tree one way and then move it to the other side to allow needles and debris to exit.

ATTENTION: Be sure when shaking heavy trees that one of the above provisions is used to prevent the shaker from tipping.

For larger, heavy trees, it may be necessary to tie/bolt the shaker down. See Illustration below.

Two 2x4's may be inserted under the channels and bolted through the holes provided in the channel using either carriage bolts inserted up from the bottom, or lag bolts inserted down from the top. Or, the shaker may be fasted to a pallet, framework, or floor. Sandbags or cement blocks may be added to the board for counterbalance.

NOTE: The freeze plug in the base of the cone must be used or debris will get into the bearings and ruin the machine. If missing, replace immediately.
MAINTENANCE INSTRUCTIONS

This Lit’l Shakee machine is shipped complete and ready to use. Follow the pre-operation checklist and instructions before use.

Due to the quality and simple design of the Shakee Christmas Tree Shakers, minimal servicing and upkeep is required.

Refer to parts lists and drawings and instructions to replace, repair, or adjust this machine.

Read all of this section before starting any repair or maintenance. Many steps are dependent on each other.

⚠️ **CAUTION:**
PERIODICALLY CHECK ELECTRICAL CONNECTIONS AND SWITCHES.

⚠️ **WARNING:**
USE ONLY HEAVY DUTY, GROUNDED OUTDOOR TYPE, 3-PRONG EXTENSION CORD IN GOOD CONDITION RATED FOR AT LEAST 15 AMPS ON 110 VOLTS, SINGLE PHASE POWER.

⚠️ **WARNING:**
DO NOT LEAVE SHAKER UNATTENDED WHILE RUNNING AS EXCESSIVE HEAT COULD CAUSE A FIRE OR DAMAGE. KEEP CHILDREN AWAY!

⚠️ **WARNING:**
ALWAYS KEEP ALL SHIELDS FURNISHED WITH THE MACHINE IN PLACE AND IN GOOD WORKING ORDER. FAILURE TO DO SO CAN RESULT IN OPERATOR BEING ENTANGLLED IN ROTATING PARTS RESULTING IN INJURY OR DEATH. KEEP CLEAR OF ROTATING PARTS AT ALL TIMES.

⚠️ **DANGER:**
BEFORE PERFORMING ANY MAINTENANCE TO YOUR V200 SHAKER, DISCONNECT THE POWER CORD FROM THE POWER SOURCE. THE MOTOR MAY BE EQUIPPED WITH AN AUTOMATIC RESET. IF THE MOTOR STOPS DUE TO OVERLOAD IT WILL RESTART WITHOUT WARNING, OR, IF MANUAL RESET, REMOVE THE COVER AND PRESS THE RESET BUTTON.

⚠️ **DANGER:**
NEVER OPERATE SHAKER WITHOUT A CONE RUBBER SLINGER IN PLACE AND SECURELY SNAPED UP UNDER THE LIP OF THE CONE. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY TO FINGERS, CREATING A SERIOUS FINGER PINCHER AND WILL ALSO ALLOW NEEDLES/TRASH TO FILL THE HOUSING, RUIN THE BELT, AND OVERHEAT THE MOTOR.
VERTICAL SHAFT MAINTENANCE
Troubleshooting the vertical crankshaft is an important part of maintenance. Check for loose bolts or bad bearings. Bearing failure is indicated by excessive heat, noise, and excessive slide and end play in crank shaft. The bearings used in this shaker are sealed and require no additional lubrication.

NOTE: After replacing bearings, let shaker run intermittently for 4-5 hours to allow for break in of bearings on vertical shaft. Heavy duty bearings take a while to loosen up. Watch for excessive heat during the first 4-5 hours of intermittent running. Shut down and let cool before restarting.

NOTE: The freeze plug in the base of the cone must be used or debris will get into the bearings and ruin the machine. If missing, replace immediately.

RETAINING BELT MAINTENANCE
The RETAINING BELT belting, attaching the cone to the frame to prevent cone rotation, is of special composition. Make no substitutions if the belting is replaced.

Frequently check belting for cracks, tears, or any sign of failure in the following manner: disconnect the shaker from the power source, rotate the cone by hand. If the outer rim of the cone rotates more than 1” in either direction, check belt for cracks or tears. Dis-assemble the belt from the cone and housing and replace with a new belt.

Be sure all hardware is tight and torqued. If belting is allowed to operate in a damaged condition, possible injury or driveline failure is possible.

NOTE: INSTALL RETAINING BELT WITH THE NYLON WEB PLYS TO THE OUTSIDE EDGE OF THE “U”. IF INSTALLED INCORRECTLY, DAMAGE AND PREMATURE FAILURE WILL OCCUR.

DRIVE BELT MAINTENANCE
Check DRIVE BELT to make sure that belt tension is proper. If belt can be easily deflected in center span more than ½”, loosen motor mount bolts, tighten up adjustment bolt, and retighten motor mount bolts.

AIR FOOT SWITCH
The V200 Shaker is equipped with an air activated remote foot pedal switch on all 1997 and later machines. The foot bellows may be placed where it is most convenient to operate. Press once to turn on, again to turn off.

In older models, be sure to spray a lubricant around the switch plunger if the off/on switch binds.

NOTE: Only a light tap should be required. Excessive pressure may cause air loss, and switch can’t work unless full of air.

NOTE: Keep the air tube out from under the frame, or it may be damaged or cut. If the tube is ruptured, cut it off smooth, and insert a nylon hose mender sleeve in both ends to rejoin. Two of these were shipped with the machine on a wire tag and fasted to a tag inside the housing.

CONE RUBBER SLINGER
Check to be sure the cone rubber Slinger is up tight against the rim of the cone. Install the slinger by sliding down over rim of the CONE. Then push Slinger up tight against the rim of the cone underneath as shown, or it will slide down cone and jam and be ruined. Keep Slinger rough side up. NEVER OPERATE WITHOUT SLINGER IN PLACE.

Clearance must be between 1/4” and 3/8”. Shim up drive assembly as needed. Slinger must be above bead.
PULLEY, BELT AND SHAFT ALIGNMENT
The small pulley may be repositioned, upward or downward, on the 5/8" diameter motor shaft in order to gain proper belt alignment. Both pulleys must be in line during operation. Misalignment of belt pulleys and belt will cause premature failure of the belt.

CONVERTING ELECTRIC MODEL TO AIR FOOT SWITCH
For conversion, follow these instructions

1. Remove the cover off the shaker.
2. Unbolt and pull out switch; remove cover from motor electrical box. Cut off extra wires and discard switch and wires. Leave plenty of wire on power cord.
3. One “P” wire in motor or wires No. T2, T4 & T5, should already be attached to a white wire coming from the power cord. Leave as is.
4. There is another “P” wire attached to 2 other “T” wires. Leave as is. Install a spade connector to the other power cord wire.
5. Knock out the inner slug from the front of the motor electric box and install switch as shown using a ½" flat washer under the plastic nut.
6. Push to 2 spade connectors on to the outer terminals of the switch. Plug the air hose onto the switch nipple.
7. Plug in the power cord and check for proper operation. Depressing the air bellows should turn the switch on and pressing again should turn it off.
8. Route the hose out through the wire slot followed by the wire grommet. Check belt tension, then reinstall the covers.
9. Wire the tube mender nipples with the tag to the power cord, inside.

NOTE: Only a light tap on the foot pedal should be required. Excessive pressure may cause air loss and switch can’t work unless full of air.

NOTE: After assembly is complete, let shaker run intermittently for 4 or 5 hours to allow for break in of bearings on vertical shaft. (Heavy duty bearings as used in this unit will take time to loosen and break in.) Watch for excessive heat during the first 4-5 hours of intermittent running. Shut down and let cool before restarting.

ELECTRIC MODEL WITH SUBSTITUTE MOTOR
We recommend using a 110 volt, single phase, ¾ HP, 1750 RPM, TEFC electric motor. All drive components, including pulley and belts, were originally designed around these specifications. Using a different motor other than what is recommended may cause belt and drive problems. Depending on your electric motor frame style, some modification may be required in the motor plate to assure proper mounting. Therefore, a substitute motor is NOT RECOMMENDED.
# TROUBLESHOOTING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaker unit moves or slides on asphalt surface.</td>
<td>Needs additional weight.</td>
<td>Bolt on 2x4s or attach to floor, pallet, etc, and weigh down with sandbags or blocks.</td>
</tr>
<tr>
<td>In heavy or dense trees, large amount of undropped dead needles.</td>
<td>Not shaking long enough, tree wet, or shaker running slow.</td>
<td>Allow tree to shake several additional seconds to help dislodge dead needles, or tilt tree in a more vertical position to allow dead needles to drop from bottom of tree. If slow, check drive belt tension. With belt loose, cone should spin freely by hand. Excessive drag or end play will require replacing bearing.</td>
</tr>
<tr>
<td>Cone rotates and pulls to distort belt.</td>
<td>Bearing tight or damaged.</td>
<td>With belt loose, cone should spin freely by hand. Excessive drag or end play will require replacing bearing.</td>
</tr>
<tr>
<td>Cone does not rotate at full speed under load.</td>
<td>Drive belt worn or loose.</td>
<td>Tighten or replace belt. See Driveline Maintenance instruction for correct installation.</td>
</tr>
<tr>
<td>Electric motor cuts out.</td>
<td>Motor automatic thermal overload tripping due to inadequate power supply.</td>
<td>The motor will not overheat and overload in any reasonable use unless the air cooling is blocked by needles around the shaker, or the power supply is inadequate. Use a larger extension cord and make sure the power source is also adequate. Check voltage at the point where the shaker plugs into the cord with the shaker shaking the tree. If the voltage drops below 100 volts, the power supply is the problem. Have an electrician check the connections, circuitry, and switch and correct as needed.</td>
</tr>
<tr>
<td>Foot pedal does not activate shaker.</td>
<td>Pedal bellows have a leak, Air switch is not functioning or the hose is damaged.</td>
<td>Disconnect the pedal from the hose, using an air compressor, lightly release air into the hose to see if switch on the motor still works. If motor is activated using this method, replace the foot pedal. If motor is not activated, replace the air switch. To repair hose, use hose repair kit.</td>
</tr>
</tbody>
</table>
## PARTS LIST FOR LIT’L SHAKEE V200E

<table>
<thead>
<tr>
<th>NO</th>
<th>PART #</th>
<th>QTY</th>
<th>PART DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SV2995</td>
<td>1</td>
<td>Frame Shipping Unit (Includes items 1, 14, 15 &amp; 22)</td>
</tr>
<tr>
<td>2</td>
<td>2688</td>
<td>1</td>
<td>A-29 V Belt</td>
</tr>
<tr>
<td>3</td>
<td>2612</td>
<td>1</td>
<td>5&quot; O.D. Pulley</td>
</tr>
<tr>
<td>4</td>
<td>2636</td>
<td>3</td>
<td>Bearing 35 mm x 72 mm</td>
</tr>
<tr>
<td>5</td>
<td>SV2976</td>
<td>1</td>
<td>Tube Mount</td>
</tr>
<tr>
<td>6</td>
<td>SV2975</td>
<td>1</td>
<td>Main Shaft Weld Assembly</td>
</tr>
<tr>
<td>7</td>
<td>2679</td>
<td>1</td>
<td>Snap Ring</td>
</tr>
<tr>
<td>8</td>
<td>2708</td>
<td>1</td>
<td>Cone Bearing Retaining Washer</td>
</tr>
<tr>
<td>9</td>
<td>2695</td>
<td>1</td>
<td>Retaining Belt (Special, don’t substitute)</td>
</tr>
<tr>
<td>10</td>
<td>2634</td>
<td>2</td>
<td>Retaining Belt Clamp Plate</td>
</tr>
<tr>
<td>11</td>
<td>2649 OR</td>
<td>1</td>
<td>Cone &amp; Bearing Housing (will also need item 12)</td>
</tr>
<tr>
<td></td>
<td>2650</td>
<td>1</td>
<td>Complete Cone &amp; Bearing Assembly (Includes items 4, 7, 8, 11 &amp; 12)</td>
</tr>
<tr>
<td>12</td>
<td>2707</td>
<td>1</td>
<td>Cone Freeze Plug 1 3/8”</td>
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<tr>
<td>13</td>
<td>SV2970</td>
<td>1</td>
<td>Cone Rubber Slinger</td>
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<tr>
<td>14</td>
<td>SV2968</td>
<td>1</td>
<td>Wear Disk UHMW</td>
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<tr>
<td>15</td>
<td>SV2988</td>
<td>1</td>
<td>Front Cover</td>
</tr>
<tr>
<td>16</td>
<td>SV1001Old</td>
<td>1</td>
<td>Side Foot Switch - Old – on pre-1997 machines</td>
</tr>
<tr>
<td>17</td>
<td>SV2989</td>
<td>1</td>
<td>Rubber Grommet</td>
</tr>
<tr>
<td>18</td>
<td>SV2985 OR</td>
<td>1</td>
<td>3/4 HP Electric Motor only</td>
</tr>
<tr>
<td></td>
<td>SV2991</td>
<td>1</td>
<td>3/4 HP Electric Motor Complete, with air switch, wiring and 2” pulley and U-Nuts</td>
</tr>
<tr>
<td>19</td>
<td>SV2977</td>
<td>1</td>
<td>2” O.D. Motor V Pulley</td>
</tr>
<tr>
<td>20</td>
<td>SV2981</td>
<td>1</td>
<td>Motor Mounting Plate Weldment</td>
</tr>
<tr>
<td>21</td>
<td>SV3006</td>
<td>1</td>
<td>Decal Set</td>
</tr>
<tr>
<td>22</td>
<td>SV2986</td>
<td>1</td>
<td>OPT Tree Holder</td>
</tr>
<tr>
<td>23</td>
<td>S105</td>
<td>A/R</td>
<td>Shakee Red Touch Up Spray Paint 16 OZ Can</td>
</tr>
<tr>
<td>24</td>
<td>SV2978</td>
<td>1</td>
<td>Complete Vertical Shaft Assembly (w/complete cone, tube mount, 5” OD pulley,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>bearings, retaining belt &amp; plates. (Cone Rubber Slinger &amp; V Belt are separate)</td>
</tr>
<tr>
<td>25</td>
<td>SV3021SW</td>
<td>1</td>
<td>Air Switch (attaches to motor for foot operated pedal)</td>
</tr>
<tr>
<td>26</td>
<td>SVHD3020BL</td>
<td>1</td>
<td>Foot Pedal &amp; Hose, Heavy Duty, replaces bulb in 2010</td>
</tr>
<tr>
<td>27</td>
<td>SV3025HM</td>
<td>1</td>
<td>Hose Mender (2 nylon nipples) on wire tag</td>
</tr>
<tr>
<td>28</td>
<td>SVAIRCONV</td>
<td>1</td>
<td>Air Switch Conversion Kit (includes items 26, 27, 28)</td>
</tr>
</tbody>
</table>

### HARDWARE

| O/L* | 1     | 1/8"X 1/8" X 1" Key       |
| O/L* | 4     | #10 X 5/8" Thread Forming Tap Screw |
| O/L* | 4     | #10 Flatwasher            |
| O/L* | 1     | 1/4" X 7/8" Woodruff Key  |
| O/L* | 2     | 1/4" NC X 1/2" SHSS      |
| O/L* | 2     | 1/4" NC X 1" Full Thread HHCS |
| O/L* | 2     | 1/4" NC Hex Nut           |
| O/L* | 6     | 5/16" NC X 1" HHCS-GR-5  |
| O/L* | 6     | 5/16" NC Flange Locknut   |
| O/L* | 4     | 5/16" Flatwasher          |
| MF312UNT | 2 | 5/16" NC U-Nut           |
| O/L* | 2     | 3/8" NC X 1/2" SHSS      |
| O/L* | 2     | 3/8" NC X 1-1/4" HHCS-GR-5 |
| O/L* | 4     | 3/8" NC X 1" Carriage Bolt |
| O/L* | 1     | 3/8" NC X 2-1/2" Full Thread HHCS-GR-5 |
| O/L* | 6     | 3/8" NC Flange Locknut   |
| O/L* | 1     | 3/8" Flatwasher           |
| MF010SHB | 1 | 1/2" NC X 3/4" Socket Head Bolt |
| O/L* | 1     | 1/2" STD Flatwasher       |

O/L* - OBTAIN LOCALLY  A/R – AS REQUIRED  OPT - OPTIONAL
PARTS DIAGRAM FOR LIT’L SHAKEE

For parts, please call 503.634.2242 or visit our website at www.resequipment.com.
CONE & SHAFT ASSEMBLY DIAGRAM

Cone Rubber Slinger

Cone Freeze Plug

Socket Head

Cone

Retaining Belt Clamp Plates

Retaining Belt

Bearing Retaining Washer

Bearing

Snap Ring

Main Shaft Weld Assembly

Bearing

Tube Mount

Bearing

5" O.D. Pulley

V Belt
LIT’L SHAKEE
OPTIONAL TREE HOLDER

ASSEMBLY INSTRUCTIONS

Install lower tube assembly (1) into tube welded onto end of shaker.

Install a 5/16” x 1/2” HHCS (10) into end of upper tube assembly (2) and secure with a 5/16” flange nut (11). Slide the assembly down into lower tube assembly (1). Find the bolt installed into upper tube assembly to rest on top of lower tube assembly.

Note: The cross tube on top of the upper tube assembly will angle upward toward the center of the shaker.

Install end camps (4) into arm assemblies (3) shown. Secure arm assemblies (3) into upper tube assembly (2) using 5/16” x 1 1/2” HHCS and 5/16” flange nut.

LIT’L SHAKEE TREE HOLDER
PARTS LIST

<table>
<thead>
<tr>
<th>NO</th>
<th>PART #</th>
<th>QTY. REQ.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SV2956</td>
<td>1</td>
<td>Lower Tube Assembly</td>
</tr>
<tr>
<td>2</td>
<td>SV2969</td>
<td>1</td>
<td>Upper Tube Assembly</td>
</tr>
<tr>
<td>3</td>
<td>SV2965</td>
<td>2</td>
<td>Arm Assembly</td>
</tr>
<tr>
<td>4</td>
<td>SV2987</td>
<td>2</td>
<td>Foam End Caps</td>
</tr>
<tr>
<td>10</td>
<td>Obtain locally</td>
<td>3</td>
<td>5/16” NC x 1 1/2” HHCS</td>
</tr>
<tr>
<td>11</td>
<td>Obtain locally</td>
<td>3</td>
<td>5/16” NC Flange Locknut</td>
</tr>
</tbody>
</table>
WARRANTY

Shakee warrants each new product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life of the machine or components, not to exceed 24 consecutive months from the date of delivery of the new product to the original purchaser.

Under no circumstances will it cover any merchandise or components thereof, which, in the opinion of the company, has been subjected to negligent handling, misuse, alteration, and accident, or if repairs have been made with parts other than those obtainable through Shakee. The company in no way warrants engines, motors, batteries, tires or other trade accessories since these items are warranted separately by their respective manufacturers.

Our obligation under this warranty shall be limited to repairing or replacing free of charge to the original purchaser any part that in our judgement shall show evidence of such defect, provided further that such part shall be returned within thirty (30) days from date of failure to Shakee through the dealer from whom the purchase was made. Transportation charges shall be prepaid by the customer.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential, or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any expense or loss incurred for labor, supplies, substitute machinery, rental or for any other reason.

There are no warranties, either expressed or implied, or merchant ability or fitness for particular purpose intended or fitness for any other reason.

This warranty is subject to any existing conditions of supply which may directly affect our ability to obtain materials or manufacture replacement parts.

Shakee reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligations to owners or units previously sold.

NO ONE is authorized to alter, modify, or enlarge this warranty nor the exclusions, limitations, and reservations.

RES Equipment – Evergreen Christmas Tree Equipment – Shakee
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MANUFACTURED BY RES EQUIPMENT

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