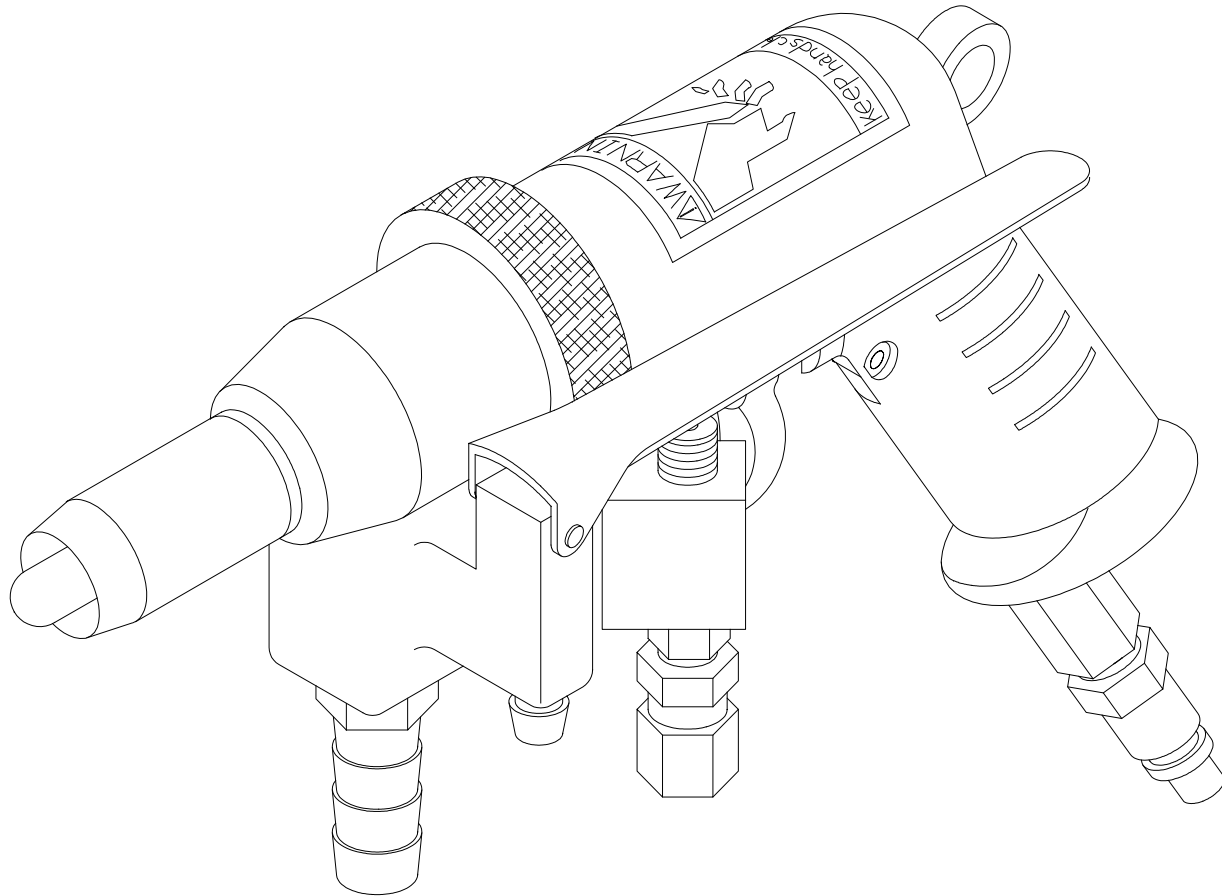




# Model VC Poultry Vent Cutter



EQUIPMENT  
SELECTION ..... Ordering No.

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6222009:::

## PRODUCTS CORPORATION

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**SAFETY MESSAGES TO EMPLOYER AND SAFETY DIRECTOR**  
*AVOID INJURY*

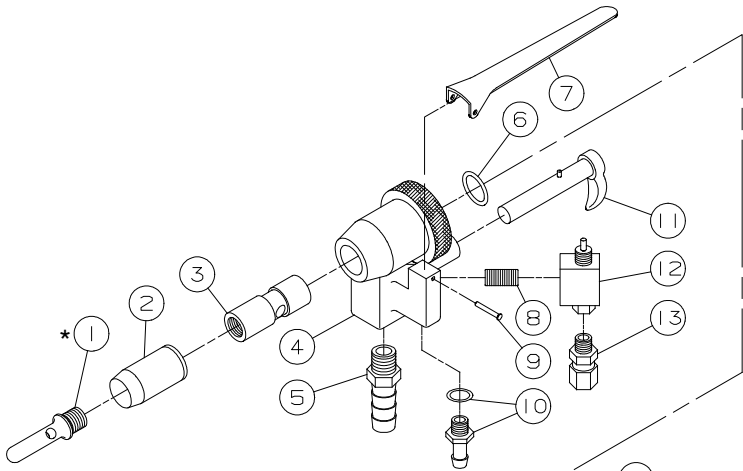
1. **Remove** and **repair** any tool that malfunctions. **All** personnel must be instructed to remove any malfunctioning tool.
2. **Ensure** that all employees who use this tool are trained in the proper use of this tool and are aware of the dangers that may arise if they do not follow the procedures outlined in this brochure.
3. **Ensure** that all employees who use this tool wear a steel mesh glove at all times. **Do not rely** on the steel mesh glove for safety; employees who use this tool must be instructed to keep their free hand(s) away from the cutting edge and the cutting path of the tool.
4. **Enclosed** are four (4) copies of “**NOTICE TO OPERATORS, MAINTENANCE AND CLEANUP PERSONNEL.**” Post one copy on the employees’ bulletin board; give one copy to the operator(s); give one copy to the maintenance foreman; and give one copy to the sub-contract / internal cleanup foreman. *Additional copies will be provided upon request.*
5. The tool is designed and intended to be powerful. This fact should be obvious to your employees, but you must emphasize it to them.
6. **Never** make modifications or alterations to the tool. *Replace any missing or illegible labels.*
7. **Ensure** that proper procedures are established (in accordance with OSHA’s lockout/tagout procedures 29 CFR 1910.147) to prevent accidental startup or release of stored energy.
8. **Hand/Wrist/Arm** injury and other Cumulative Trauma Disorders may result from repetitive work, motion or vibration. You must make your employees aware of hazards, symptoms of injury and appropriate prevention. See OSHA’s “Ergonomics Program Management Guidelines for Meatpacking Plants.”
9. **Follow** our installation and maintenance instructions for proper installation and care of the tool.
10. **Avoid** injury. Do not permit the tool to be misused.
11. **If you resell or distribute** a Jarvis product, you must provide the purchaser with the appropriate safety sheets and tool brochure. *Additional copies of safety sheets and tool brochures will be provided upon request.*



**SAFETY MESSAGES TO OPERATORS, MAINTENANCE AND CLEANUP  
PERSONNEL**

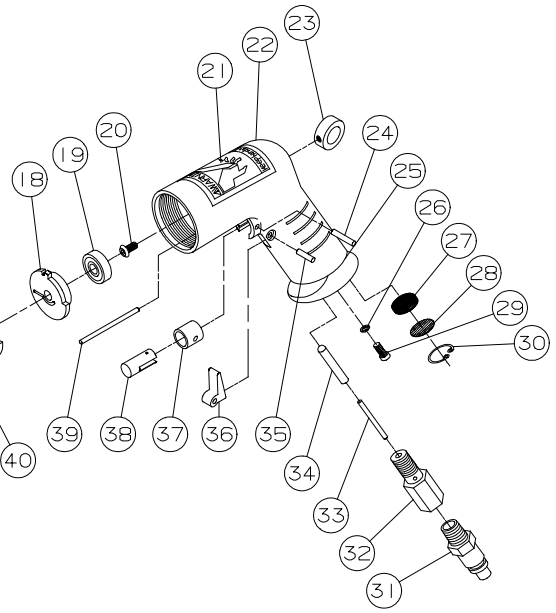
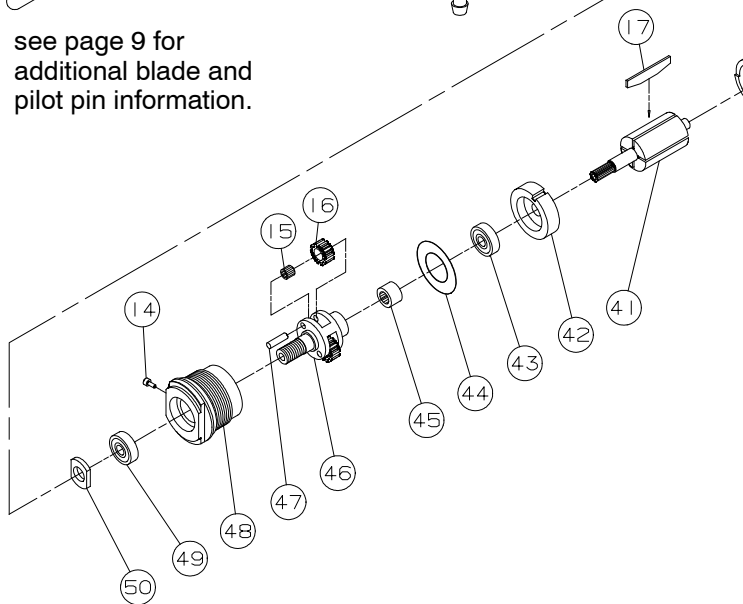
***REMOVE ANY MALFUNCTIONING TOOL FROM SERVICE  
REPORT ANY PROBLEMS TO YOUR SUPERVISOR***

1. **Disconnect** the air supply in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before changing the blade.
2. **Disconnect** the air supply in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before performing any repairs or maintenance.
3. **Disconnect** the air supply - or have the air supply disconnected - in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before performing any cleanup.
4. **Disconnect** the air hose when the tool is not in use.
5. **Never** put fingers, hands or other parts of the body on the cutting edge of the blade or in the cutting path of the tool.
6. **Always** wear a steel mesh glove on the hand that is not operating the tool. **Always** wear steel mesh gloves when handling the blade.
7. **Test** the tool prior to use or daily. **Pull** the trigger and the tool should start; **release** the trigger and the tool should stop. *If the tool malfunctions, remove it from service and report or repair it immediately.*
8. **Never** depress the trigger unless you want to use the tool.
9. **Never** make modifications or alterations to the tool. *Report or replace any missing or illegible labels.*



**Model VC  
Figure A**

see page 9 for additional blade and pilot pin information.

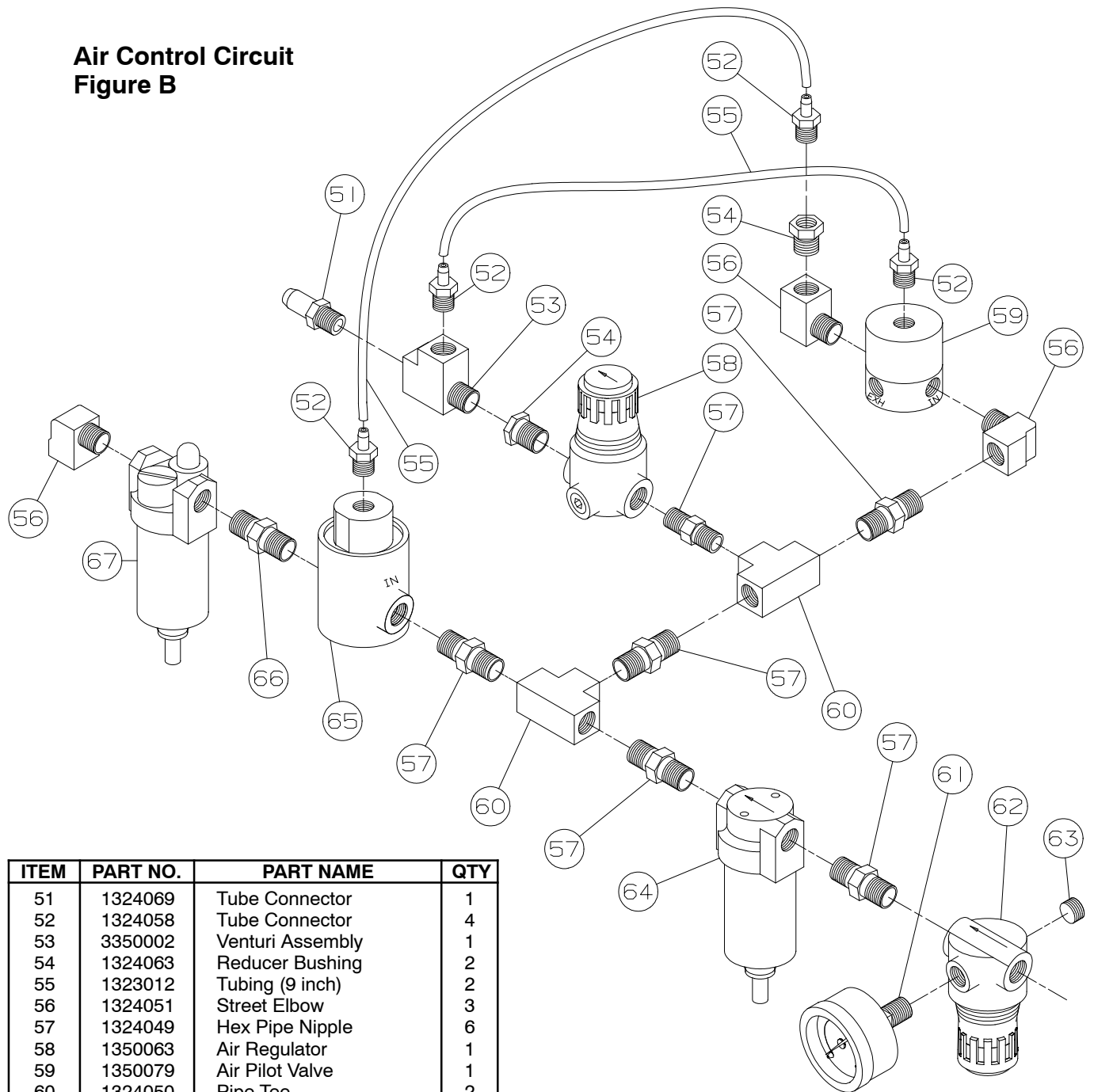


\* use tool 8327001 to remove

ITEM	PART NO.	PART NAME	QTY
1	1327038	3/8 inch Pilot Pin	1
2	3332001	7/8 inch Blade	1
3	1312043	Cutter Shaft	1
4	3330007	Shaft Housing Assembly	1
5	1324040	Hose Connector	1
6	1343004	O-ring	2
7	1350032	Throttle Lever	1
8	1324033	Close Pipe Nipple	1
9	1350033	Lever Pivot Pin	1
10	1324061	Tube Connector w/Washer	1
11	3327002	Trigger Pin Assembly	1
12	1346001	Water Valve	1
13	1324066	Tube Connector	1
14	1350066	Grease Fitting	2
15	1311019	Needle Bearing	2
16	1342003	Planetary Gear	2
17	1350042	Rotor Vane	4
18	1304035	Motor End Plate (Rear)	1
19	1311020	Ball Bearing	1
20	1301060	Screw	1
21	1017084	Warning Label	1

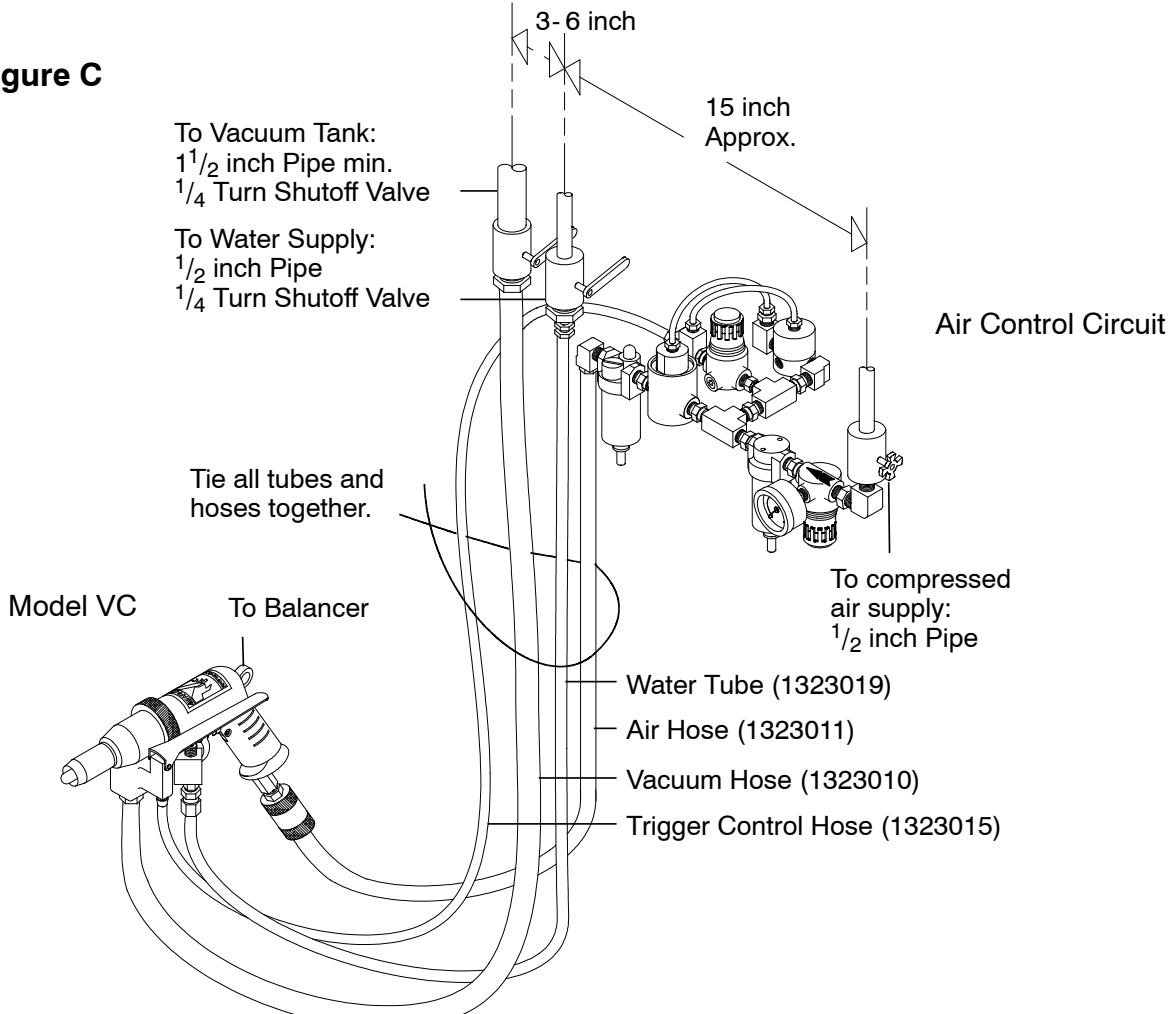
ITEM	PART NO.	PART NAME	QTY
22	1330042	Pistol Grip Handle (includes items 20- 23)	1
23	1317010	Hanger Ring	1
24	1327062	Trigger Retaining Pin	1
25	1343022	Gasket Seal	1
26	1303022	Split Lock Washer	2
27	1350081	Air Exhaust Muffler	1
28	1350043	Air Screen	1
29	1301092	Socket Head Cap Screw	2
30	1317012	Retaining Ring	1
31	1324017	Quick Connect Coupling	1
32	1350080	Air Inlet Valve	1
33	1327064	Valve Stem Pin	1
34	1327063	Valve Pin	1
35	1327048	Cam Retaining Pin	1
36	1349001	Trigger Cam	1
37	1338017	Trigger Bushing	1
38	1345005	Air Motor Trigger	1
39	1327046	Rotor Housing Pin	1
40	1337018	Rotor Sleeve	1
41	1312044	Splined Rotor	1
42	1304034	Motor End Plate (Front)	1
43	1311021	Ball Bearing	1
44	1303019	Washer	1
45	1311018	Needle Bearing	1
46	1312045	Gear Shaft	1
47	1327047	Planetary Gear Pin	2
48	1342004	Ring Gear	1
49	1311017	Ball Bearing	1
50	1316037	Shaft Spacer	1

**Air Control Circuit  
Figure B**

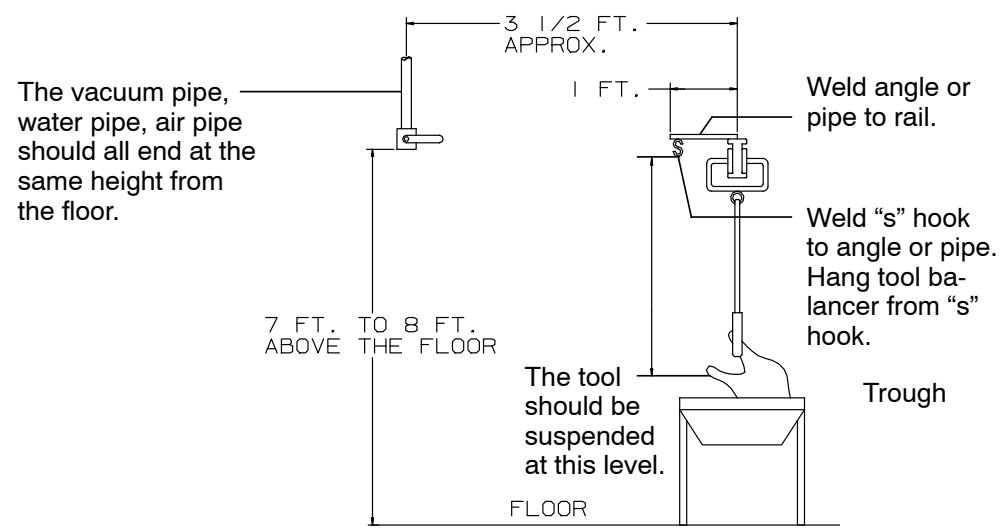


ITEM	PART NO.	PART NAME	QTY
51	1324069	Tube Connector	1
52	1324058	Tube Connector	4
53	3350002	Venturi Assembly	1
54	1324063	Reducer Bushing	2
55	1323012	Tubing (9 inch)	2
56	1324051	Street Elbow	3
57	1324049	Hex Pipe Nipple	6
58	1350063	Air Regulator	1
59	1350079	Air Pilot Valve	1
60	1324050	Pipe Tee	2
61	1350048	Air Pressure Gauge	1
62	1350067	Air Regulator	1
63	1324039	Hex Soc Pipe Plug	1
64	1350050	Air Filter	1
65	1350078	Air Pilot Valve	1
66	1346007	Check Valve	1
67	1350057	Air Lubricator	1
	1323015	Trigger Control Hose	ft
	3343009	Seal Kit for item 59	

**Figure C**



**Figure D**



## SPECIFICATIONS

### Model VC

Operating Pressure	30-60 psi	2.0-4.1 bar
Air Consumption	5.6-14 ft <sup>3</sup> /min	0.16-0.39 m <sup>3</sup> /min
Vacuum Requirements	15 in Hg	50.8 kPa
Air Flow(vacuum)	6-7 ft <sup>3</sup> /min	0.16-0.19 m <sup>3</sup> /min
Capacity Limited by operator skill (avg. 3000 / hour)		

Control Handle	Single Trigger	
Blade Dia. (range)	0.75-1.75 in	19-44 mm
Blade Length (range)	0.88-3.50 in	22-89 mm
Overall Length	11.0 in	267 mm
Weight	3.2 lbs	1.45 kg

## INSTALLATION INSTRUCTIONS

- 1 Make a bracket to suspend the Model VC and balancer. *Refer to Figure D, page 6.*
- 2 Install a balancer (1350084) from the bracket. *Refer to Figures C and D, page 6.*
- 3 Suspend the Model VC from a balancer (1350084). *Refer to Figures C and D, page 6.*
- 4 Make the necessary vacuum connection. *Refer to Figures C and D, page 6.*
- 5 Make the necessary water connection. *Refer to Figures C and D, page 6.*
- 6 Make the necessary air connection. *Refer to Figures C and D, page 6.*
  - 6.1 The air control circuit (3350006) must be installed in the air supply line.
    - 6.1.1 The required compressed air supply is 14 ft<sup>3</sup>/min at 60 psi.
- 7 Model VC hook-up. *Refer to Figure C, page 6. Refer to pages 4 and 5 for all referenced items.*
  - 7.1 Vacuum:
    - 7.1.1 Attach the 8 ft. vacuum hose (1323010) to the vacuum supply.
    - 7.1.2 Attach the 8 ft. vacuum hose (1323010) to connector (item 5).
  - 7.2 Water:
    - 7.2.1 Attach the 8 ft. water tube (1323019) to the water supply.
    - 7.2.2 Attach the 8 ft. water tube (1323019) to connector assembly (item 13).
  - 7.3 Air:
    - 7.3.1 Attach the air hose (1323011) to street elbow (item 56).
    - 7.3.2 Attach the air hose (1323011) to quick connect coupling (item 31).
    - 7.3.3 Attach trigger control hose (1323015) to tube connector (item 51).
    - 7.3.4 Attach trigger control hose (1323015) to tube connector (item 10).

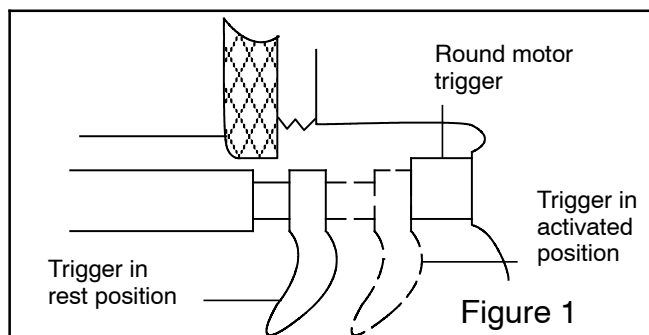
## OPERATION INSTRUCTIONS

**IMPORTANT: DISCONNECT THE AIR LINE IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE SHARPENING BLADES. DISCONNECT THE AIR LINE IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE PERFORMING ANY REPAIR OR MAINTENANCE.**

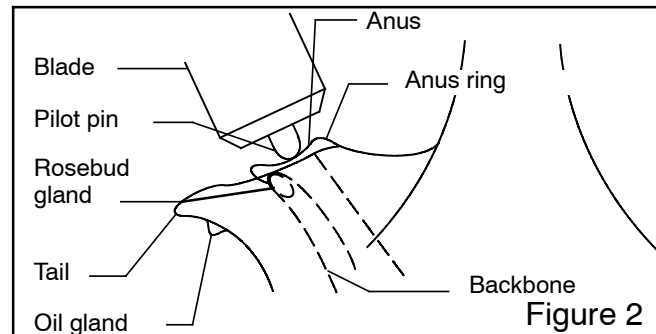
Refer to pages 4 and 5 for all referenced items.

- 1 Attach the 8 ft. vacuum hose (1323010) to connector (item 5).
- 2 Attach the 8 ft. water tube (1323019) to connector assembly (item 13).
- 3 Attach the air hose (1323011) to quick connect coupling (item 31).
- 4 Attach trigger control hose (1323015) to tube connector (item 10).
- 5 *Each day*, before you begin operation, go through the following checklist:
  - 5.1 Make sure that the Model VC moves freely on its balancer.
  - 5.2 Make sure that you are wearing a steel mesh safety glove on the hand that will not be operating the Model VC.
- 6 Making the cut:

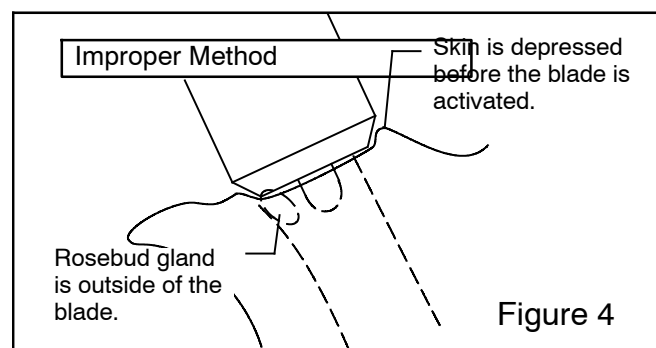
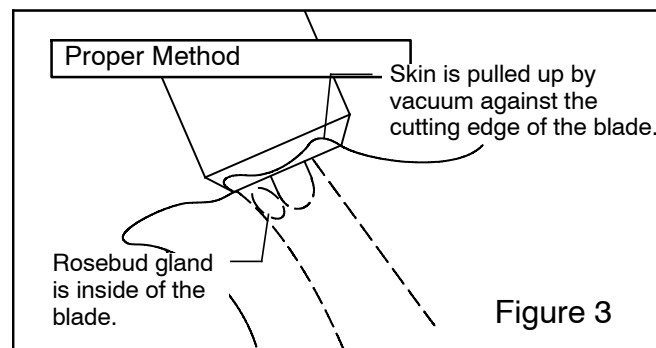
- 6.1 Pull the trigger until it touches the round trigger on the motor. This activates the vacuum at the blade. Refer to Figure 1.



- 6.2 With the vacuum activated, insert the pilot pin (item 1) into the anus of the bird. *The entire anus ring should be enclosed by the blade, and the skin of the bird should be sucked up around the entire cutting edge of the blade. Refer to Figure 2.*



- 6.3 While vacuum is holding the skin upward, pull the trigger back fully and allow the blade to rotate. Move the blade gently forward into the bird about 1/2 to 3/4 of the length of the blade. *Do not apply pressure on the bird until the blade is rotating. Refer to Figures 3 and 4.*





- 6.4 A gentle motion with a downward pressure will cut the bird properly. Forcing the blade will leave all or part of the rosebud in the bird. Do not force the blade or stab the bird with the blade. Do not let go of the trigger after fully depressing it. The blade will turn only a few revolutions and will shut off automatically (it will not cut the intestines). The vacuum will remain sucking as long as the trigger is held in the fully depressed position.
- 6.5 The blade must always be angled toward the center of the bird. If the blade is directed toward either side, it will leave solid muscle attached to the vent and this material cannot be broken loose by hand.
- 6.6 While still holding the trigger, pull the blade slowly out of the bird. The vacuum will hold the anus and the fecal material long enough for the operator to either grab the vent and move it away from the hole or to move the vent away from the hole with the gun.
- 6.7 Release the trigger. The vacuum will shutoff and release the vent into the operators hand so that it can be pulled out of the carcass and laid gently over the side of the carcass or it will release the vent over the side of the carcass if the vacuum pulls the vent completely out of the carcass.
- 6.8 After releasing the vent, the operator must aim the blade at the trough before reaching the next bird. Depress the water flush lever to flush out all materials from the blade before attempting to cut another bird. Do not flush waste material on the birds. The water will not flush out the blade unless the vacuum trigger is in the rest position. When both vacuum and water triggers are activated, all water will be sucked up the vacuum tube sending all waste material to the collector tank.
- 6.9 When a bird has fecal material on the outside of the carcass, it can be washed off with the vent gun before cutting the bird. Be sure that the blade has been sufficiently flushed into the trough before attempting to wash off any bird. Do not attempt to wash the bird after cutting into the carcass.

BLADE INFORMATION (inches)		
PART NO.	DIAMETER	LENGTH
3332001	7/8	1 3/4
3332002	3/4	1 7/8
3332003	1	2 1/8
3332004	1 1/4	2 1/8
3332005	1 1/2	2 1/8
3332006	7/8	2 5/8
3332008	1 1/8	3 5/8
3332009	1 1/4	3 5/8
3332010	1 3/8	3 5/8
3332011	1 1/2	3 5/8
3332015	1 1/8	2 1/8
3332016	1 3/8	2 1/8
3332026	1 3/4	2 7/8

PILOT PIN INFORMATION (inches)		
PART NO.	DIAMETER	LENGTH
1327038	3/8	2
1327040	1/2	2 1/2
1327041	5/16	2
1327052	1/2	3 1/4
1327053	3/8	3
1327054	3/8	2 1/2
1327057	3/8	3 3/4

## MAINTENANCE INSTRUCTIONS

**IMPORTANT:** *DISCONNECT THE AIR LINE IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE PERFORMING ANY REPAIR OR MAINTENANCE.*

*Refer to pages 4 and 5 for all referenced items.*

### 1 DAILY:

- 1.1 Check to see that the Model VC is getting enough lubrication. Each one or two pulls of the trigger should produce one drop of oil in the sight dome. If required, adjust the oil flow.
- 1.2 Make sure that the oil in the lubricator is up to the full mark. Use USDA approved **Jarvis Air Mist Lubricator Oil**. *Do not use mineral oil.*

### 2 WEEKLY:

- 2.1 Add four to five shots of grease to grease fitting (item 14). Use USDA approved **Jarvis 1315 White Grease**.

### 3 WHEN NECESSARY:

*Wear cut protective gloves when handling blades.*

- 3.1 Sharpen the blade (item 2) when the blade becomes difficult to push into the carcass, or when the cutting produces contamination.
  - 3.1.1 Place a sharpening stone on the cutting angle of the blade and activate the tool. Continue to desired sharpness. *If this action rolls the cutting edge inward, hold a small steel on the inside edge of the blade.*
  - 3.1.2 Repeat the process until the blade is sharp.
  - 3.1.3 If the angle of the blade becomes too short or when the cutting edge has excessive nicks, the blade must be reground. *Do not heat the cutting edge. Heat will anneal the*

*material and make it impossible to hold a sharp edge. Return to **Jarvis** for regrinding.*

### 4 MODEL VC BLADE DISASSEMBLY:

*Wear cut protective gloves when handling blades.*

- 4.1 While holding base of blade (item 2) in place, use special wrench (part number 8327001) to loosen pilot pin (item 1).
- 4.2 Remove blade (item 2).
- 4.3 Inspect blade (item 2) for wear and sharpen if necessary.

### 5 MODEL VC BLADE ASSEMBLY:

*Wear cut protective gloves when handling blades.*

- 5.1 Place blade (item 2) over cutter shaft (item 3).
- 5.2 Assemble pilot pin (item 1) through blade (item 2).
- 5.3 Tighten pilot pin (item 1) hand tight into cutter shaft (item 3). *The pilot pin will automatically tighten with use of the tool.*

### 6 MODEL VC DISASSEMBLY:

- 6.1 Follow steps and procedures 4.1 and 4.2.
- 6.2 Unscrew the knurled ring on shaft housing assembly (item 4).
- 6.3 Remove shaft housing assembly (item 4). *Be careful not to lose the trigger pin assembly (item 11).*
- 6.4 Place a pin through the cross hole in the cutter shaft (item 3) and hit pin with a hammer on the proper end to turn it counter-clockwise. **WARNING: pin may fly out of unit. Protect yourself and other employees when disassembling this part.**

- 6.5 Remove the cutter shaft (item 3).
  - 6.6 Place the Model VC in a soft jaw vise (apply pressure only to the handle) and unscrew ring gear (item 48).
  - 6.7 Remove the ring gear (item 48).
  - 6.8 Remove the gear shaft assembly (items 15-16, 45-47).
  - 6.9 Tap on the front of pistol grip handle (item 22) with a soft hammer (plastic lead, wood) to dislodge the motor assembly (items 17-19, 39-43).
  - 6.10 Remove the motor assembly (items 17-19, 39-43). *Do not lose rotor housing pin (item 39).*
  - 6.11 Inspect all parts for wear and replace if necessary.
- 7 MODEL VC ASSEMBLY:
- 7.1 Reverse steps and procedures outlined in steps 6.1-6.10. See note below:
    - 7.1.1 Install motor assembly with rotor housing pin (item 39) in proper place.
- 8 GEAR SHAFT DISASSEMBLY:
- 8.1 Press out planetary gear pin (item 47) from the non-threaded end of gear shaft (item 46).
  - 8.2 Remove planetary gear assemblies (items 15 and 16).
  - 8.3 Push needle bearing (item 15) from planetary gear (item 16).
  - 8.4 Use bearing puller (part number 1350131). Insert nut into the center of gear shaft (item 46). Screw cap head screw into the nut until needle bearing (item 45) is removed.
- 8.5 Inspect all parts for wear and replace if necessary.
- 9 GEAR SHAFT ASSEMBLY:
- 9.1 Press needle bearing (item 45) into gear shaft (item 46).
  - 9.2 Insert needle bearings (item 15) into planetary gears (item 16).
  - 9.3 Place bearing and gear assembly (items 15 and 16) into gear shaft (item 46) making sure that bearing hole and gear pin hole are aligned.
  - 9.4 Press planetary gear pins (item 47) into the threaded end of gear shaft (item 46).
- 10 MOTOR DISASSEMBLY:
- 10.1 Hold front motor end plate (item 42) while tapping on the splined end of the splined rotor (item 41) with a soft hammer (plastic, lead, wood).
  - 10.2 Remove the front motor end plate (item 42) and ball bearing (item 43).
  - 10.3 Slide off rotor sleeve (item 40).
  - 10.4 Remove vanes (items 17).
  - 10.5 Press splined rotor (item 41) from rear motor end plate (item 18).
  - 10.6 Press ball bearings (items 19 and 43) out of rear motor end plate (item 18) and front motor end plate (item 42).
  - 10.7 Inspect all parts for wear and replace if necessary.
- 11 MOTOR ASSEMBLY:
- 11.1 Reverse steps and procedures outlined in steps 10.1-10.6.

<b>TROUBLESHOOTING</b>	
<i>REMOVE ANY MALFUNCTIONING TOOL FROM SERVICE</i>	
<b>PROBLEM</b>	<b>SOLUTION</b>
<p>MOTOR RUNS WHEN THE TRIGGER IS RELEASED. <i>Refer to page 4 for referenced items.</i></p>	<p><b>CHECK THE AIR MOTOR TRIGGER (ITEM 38).</b> If the trigger flops in and out or stays depressed when touched, it is malfunctioning. Remove the air inlet valve (item 32) and valve stem pin (item 33). With long nose pliers, remove valve pin (item 34). Clean pins until their surfaces are smooth. Clean out the deepest hole in the pistol grip handle (item 22) with a drill. Rotate the drill by hand. Do <i>not</i> increase the size of the hole.</p>
	<p><b>CHECK THE O- RING LOCATED IN AIR INLET VALVE (ITEM 32).</b> Remove the retaining ring, screen, spring, and poppet from the air inlet valve (item 32). Check for an o- ring on the poppet. If there is no o- ring on the poppet, check the inside of the air inlet valve. Reassemble the o- ring to the poppet and reassemble the air inlet valve.</p>
<p>BLADE DOES NOT ROTATE AND SHUT OFF WHEN TRIGGER IS PULLED. <i>Refer to page 5 for referenced items.</i></p>	<p><b>ADJUST AIR REGULATOR (ITEM 58).</b> Pull trigger on Model VC, and turn air regulator knob (item 58) clockwise until the blade on the vent gun turns off. Continue to adjust until desired number of blade rotations is accomplished.</p>
	<p><b>CHECK AIR PILOT VALVE (ITEM 59).</b> Remove four screws and cover on air pilot valve (item 59) carefully. Check rubber diaphragm. If the rubber diaphragm has a hole, it must be replaced (part number 3343009).</p>
	<p><b>CLEAN VENTURI ASSEMBLY (ITEM 53).</b> If the regulator has no range of adjustment, clean the venturi assembly. Remove tube connector (item 52). Clear the small hole in the silver pin with a small diameter wire. Do <i>not</i> increase the size of the hole.</p>
<p>BLADE DOES NOT ROTATE WHEN TRIGGER IS PULLED. <i>Refer to pages 4 and 5 for referenced items.</i></p>	<p><b>CHECK THE AIR SUPPLY.</b> The air pressure gage (item 61) must show pressure.</p>
	<p><b>CHECK THE VACUUM.</b> When trigger is pulled, there is suction at the blade. If there is no suction at the blade, the air supply to the tool is shut off.</p>
	<p><b>CHECK VANES (ITEM 17).</b> If air is exhausting through the butt of the pistol grip handle, release trigger and turn blade 1/2 revolution. Pull trigger. If the Model VC runs properly now, it is an indication of sticky vanes (causes: wrong oil, dirt in slots, lack of oil). Disassemble motor, clean rotor, and check length of vanes (they should be .002 shorter than the length of the rotor). Check rotation of each bearing (they should rotate freely).</p>
<p>WATER VALVE LEAKS. <i>Refer to page 4 for referenced items.</i></p>	<p><b>WATER VALVE LEAKS AT TIME OF INSTALLATION.</b> Check for metal fragments from the threaded pipe. Remove water tube from tube connector (item 13). Remove tube connector (item 13). Check water valve (item 12) for debris, and remove debris with small pointed object. Do <i>not</i> damage spring or seal.</p>
	<p><b>WATER VALVE LEAKS AFTER CONSIDERABLE USE.</b> Replace water valve (item 12).</p>