

## Cantrell KFC Cut-Up Saw (Whole Bird)

Technical Manual

Volume 1, Issue 2

Model: CS-100



[www.cantrell.com](http://www.cantrell.com)

P.O. Box 757  
1400 Bradford Street Ext.  
Gainesville, Ga 30503

p: 770.536.3611  
f: 770.531.0832  
1.800.922.1232

## FOREWORD

Thank you for purchasing the finest KFC Cut-Up Saw available on the market today. Cantrell has made every effort to cover all aspects of maintenance, adjustments and operation procedures required to provide the optimum yield and performance from the Model: CS-100 KFC Cut-Up Saw.

Please carefully read this entire manual before beginning any procedures on or with the Cantrell Model: CS-100 KFC Cut-Up Saw to avoid any injury or damage to personnel and/or machine components.

The purpose of this manual, aside from operation, maintenance and repair, is to promote safety through use of correct practices and procedures. **READ, UNDERSTAND AND FOLLOW** the safety and operating instructions contained throughout this manual before operating the machine.

The specifications as stated herein are the most current at the time of publication. However, consistent with our standard of continual product improvement. We reserve the right to change the design without notice or obligation to modify any equipment previously sold or delivered.

Within the following text and illustrations certain occurrences of the words “NOTE”, “CAUTION” and “WARNING” may be found. Pay close attention to these when performing any particular procedure.

**“NOTE”** Instruction or reminders that can help in making a given procedure or task easier and/or faster as well as safer.

**“CAUTION”** Advice to help avoid personal injury or component/machine damage.

**“WARNING”** Vital instructions for certain procedures to avoid serious personal and/or component/machine damage. Pay very close attention.

## TABLE OF CONTENTS

Section I:	SAFETY PRECAUTIONS .....	4
	DECAL DESCRIPTIONS.....	.5 thru 6
Section II:	FAMILIARIZATION .....	7
	2.1 INTRODUCTION	
	2.2 NOMENCLATURE	
Section III:	SPECIFICATIONS .....	8
	3.1 CONSTRUCTION	
	3.2 GENERAL SPECIFICATIONS	
Section IV:	INSTALLATION .....	9
	4.1 PREPARATION	
	4.2 LOCATION	
	4.3 ELECTRICAL	
	4.4 ADJUSTMENTS	
	4.5 BLADE GUARD	
	4.6 TABLE / FRAME	
Section V:	MAINTENANCE.....	10 thru 11
	5.1 BLADE REMOVAL / REPLACEMENT	
	5.2 CLEANING	
	5.3 LUBRICATION	
	5.4 LUBRICATION CHART	
Section VI:	PARTS.....	12 thru 14
	6.1 PARTS ORDERING PROCEDURE	
	6.2 PARTS DIAGRAM	
	6.2 PARTS LIST	
Section VII:	MAINTENANCE RECORD.....	15

## Section I | SAFETY PRECAUTIONS

The Model CS-100 Cantrell Cut-Up Saw was designed for maximum personal safety. However, as with any operating machinery, certain safety precautions should be observed. Your machine may have cutting edges or moving parts which may be dangerous and can cause serious injuries. The following list of safety precautions have been developed to help production, clean-up and maintenance personnel work with this machine safely.

1. **READ, UNDERSTAND AND FOLLOW** any and all safety and operating instructions contained in this manual.  
**REALIZE AND BEWARE** of the limitations and hazards associated with this machine.
2. **EYE PROTECTION:** Always wear an approved face shield, goggles or safety glasses to protect eyes when performing maintenance on this machine.
3. **PERSONAL SAFETY:** Before performing any maintenance on the machine, remove neck ties, rings, watch and any other jewelry. Confine long hair and roll sleeves above the elbows. Remove or confine loose clothing and wear protective type footwear. Also protective type gloves should be worn to protect fingers and hands when handling sharp objects. Because of the operational and sanitation requirements, this machine has several areas where personal injury could occur to someone getting too close or making adjustments or repairs while the machine is in operation.  
**MAKE CERTAIN ALL PERSONNEL WORKING WITH, ON OR NEAR THIS MACHINE UNDERSTAND THE POTENTIAL HAZARDS ASSOCIATED WITH THE MACHINE.**
4. **ACCESS COVERS: NEVER OPERATE THIS MACHINE WITH ANY OF ITS COVERS REMOVED.** Always keep access covers in their closed position when the machine is in operation. Remove covers when performing maintenance or during wash downs only. Make certain all access covers are in place when power is applied and "ON", or while machine is in operation. **DO NOT OPERATE THIS MACHINE IF ANY ACCESS COVER HAS BEEN REMOVED.**
5. **HAND SAFETY:** Keep hands OUTSIDE the machine. NEVER reach into the machine when in operation. NEVER put hands into infeed, cutting or peeling areas of the machine with power "ON" or machine in operation. Wear protective gloves when handling or replacing parts with sharp edges.
6. **MACHINE ADJUSTMENT:** Make any and all adjustments with local power "OFF" and power from main control to machine "OFF" and "TAGGED-OUT". Never make adjustments to machine with power on or machine in operation. **DO NOT** stand on, climb on or lean over the machine while in operation. Maintenance and adjustments on this machine should NEVER be performed by production or clean-up personnel. Call qualified personnel when maintenance or adjustment is needed.
7. **MAINTAIN FIRM STANCE:** Never overreach machine. Always maintain a firm, balanced stance and keep your body under control at all times.
8. **CLOGGED CHUTE:** Should this machine stop operating due to clogged infeed or outfeed chutes or foreign matter, turn all power to the machine to "OFF" and "TAG OUT" the main control. After the power is "OFF" and "TAGGED OUT" remove necessary access covers and clean out by hand. **CAUTION:** Be certain to wear protective gloves whenever cleaning the machine.
9. **"TAG-OUT":** When performing maintenance, cleaning or repairing any machine, **MAKE CERTAIN** the local control switch is "OFF" and also the main electrical control is "OFF" and a tag reading "DO NOT OPERATE" placed on main control. This helps ensure that no one will accidentally turn the machine on while maintenance, cleaning or repair is being performed.
10. **CARELESSNESS:** Give the work you are doing your undivided attention. Looking around, carrying on a conversation and "horseplay" are careless acts that can result in serious personal injury.
11. **MACHINE STOPPED:** If the machine is stopped for any length of time, it should be thoroughly cleaned.
12. **MISUSE AND ABUSE:** Do not use this machine for anything other than its intended purpose. If this machine is used for other purposes, the warranty will be null and void. No alterations to the machine should be made unless by written authorization from Cantrell's own service personnel. Any alterations done outside the mentioned provision will render the warranty null and void. Always use proper tools and equipment when adjusting any component of the machine. Beating, twisting and bending are examples of abuse which will render the warranty null and void.
13. **ELECTRICAL HOOK-UP:** Have all electrical connections and wiring performed by a licensed electrician, in accordance with all national and local electrical codes. Have one or more emergency cut-off switches installed on or near the machine within easy reaching distance of operator(s) in case of accident.
14. **REPLACEMENT PARTS:** Always keep on hand a quantity of the most used replacement parts associated with the machine. A convenient "SPARE PARTS" list along with suggested quantities to keep on hand is provided in this manual. Always replace parts with original Cantrell replacement parts or approved replacement parts to keep the machine in its optimum operating condition. Use of other than above mentioned replacement parts will render warranty null and void.

## DISCLAIMER

Cantrell shall be held blameless for any injury or component damage resulting from repairs, modifications or adjustments attempted outside the scope of this manual, without written authorization from Cantrell. At any time, should a problem occur that is not covered in this manual, contact a service representative of Cantrell for proper procedures and/or assistance.

Section I | SAFETY PRECAUTIONS |

**NOTICE!**

The decals illustrated below are typical of the DANGER, WARNING and CAUTION decals found on this machine. READ, UNDERSTAND & FOLLOW all instructions and/or messages found on the decals before operating or servicing machine.

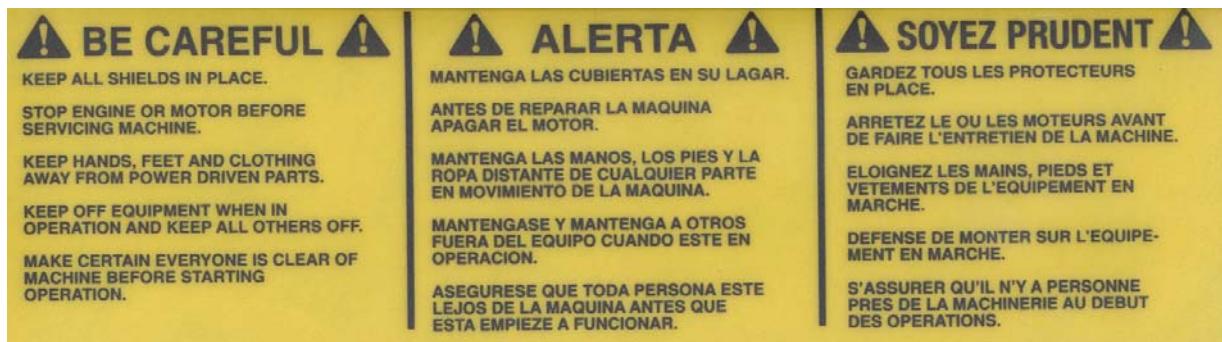


DANGER DECAL  
( Specific Machines may not have )

## Section I | SAFETY PRECAUTIONS |

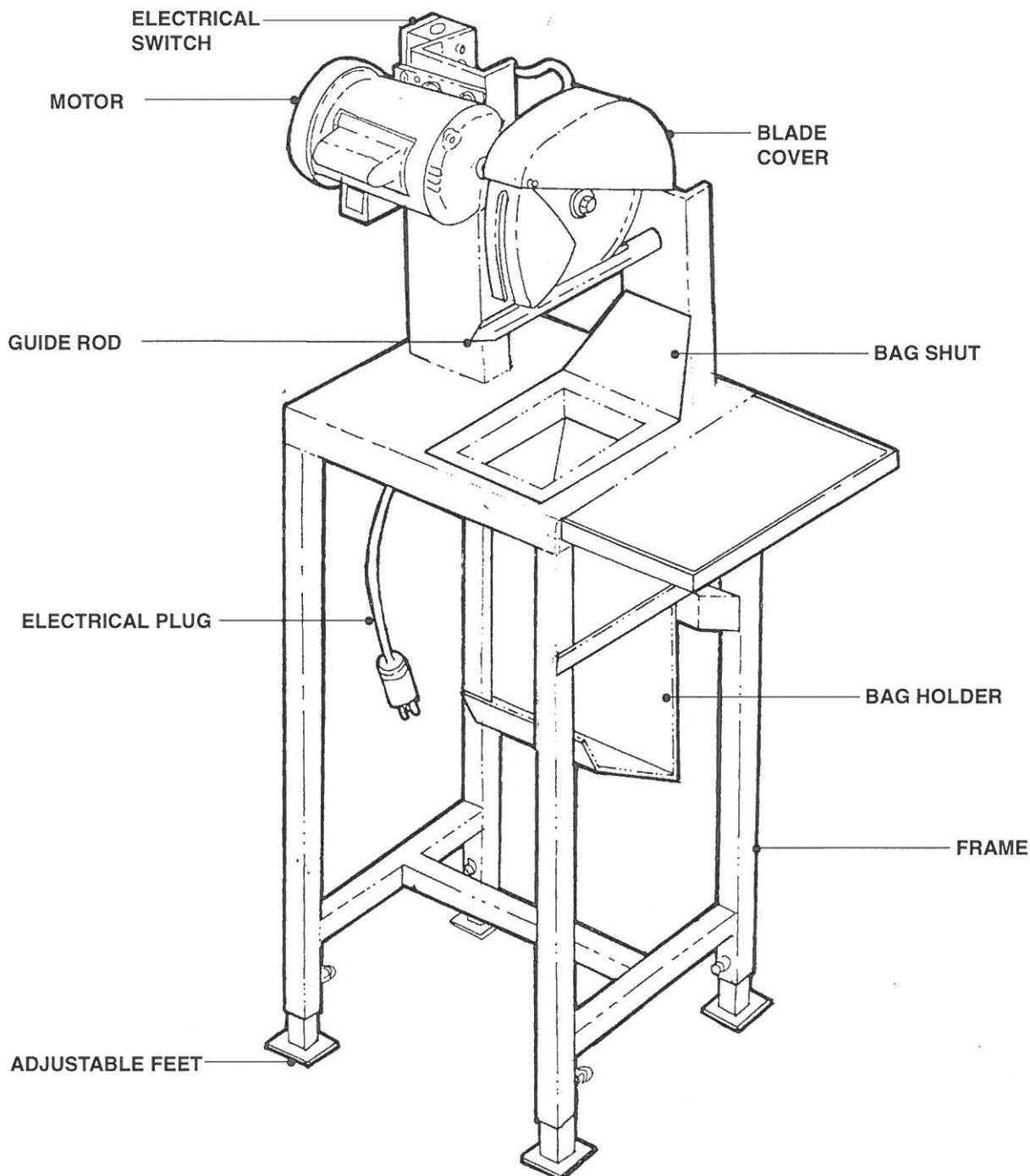
### NOTICE!

The decals illustrated below are typical of the DANGER, WARNING and CAUTION decals found on this machine. READ, UNDERSTAND & FOLLOW all instructions and/or messages found on the decals before operating or servicing machine.



WARNING DECAL  
( Specific Machines may not have )

## Section II FAMILIARIZATION



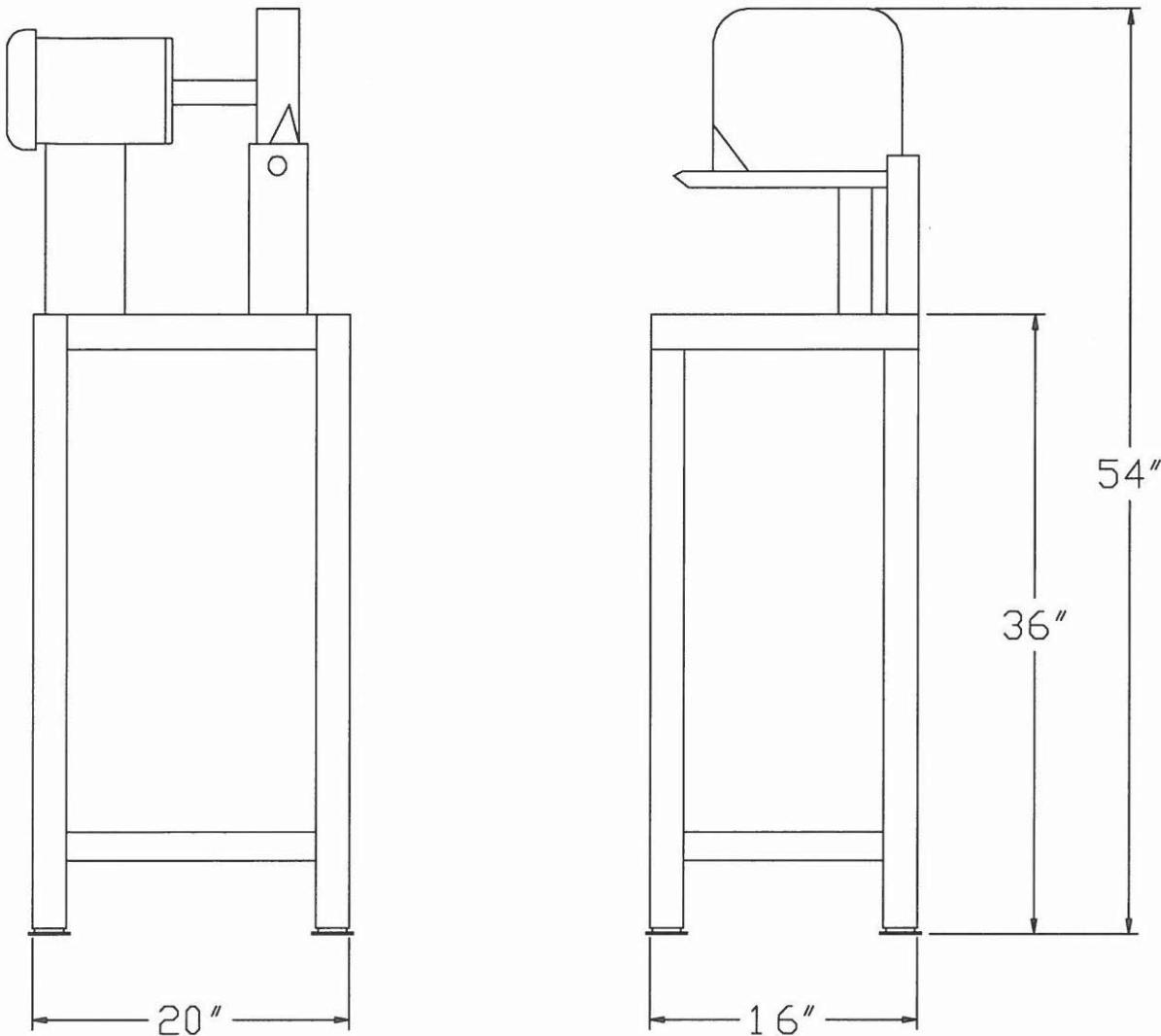
### 2.1 Introduction

The Cantrell Model CS-100 Whole Bird Cut-Up Saw is a manually fed machine designed to produce premium poultry cut-up parts of all size birds lots with a skilled operator. This machine will handle up to 3 to 4 B.P.M. (Depending upon operator).

### 2.2 Nonmenclature

The nomenclature drawing shown above (Figure 2-1) points out the major components of the Cantrell Model CS-100 Whole Bird Cut-Up Saw. It is recommended that all operators and maintenance personnel become familiar with the construction and operation of this machine before it is put on line.

## Section III SPECIFICATIONS



### 3.1 Construction

The CS-100 KFC Whole Bird Cut-Up Saw is constructed entirely of high grade stainless steel. All edges are rounded and smooth to insure a thorough and easy clean-up. The CS-100 is powered by a 1 h.p. motor and has an easily replaceable stainless steel circular blade.

### 3.2 General Specifications

Electricity:	1 HP 110 Volt / 0.75 kw
Capacity:	3 to 4 B.P.M. (Depending upon operator)
Height:	54"
Width:	20"
Depth:	16"

## Section IV INSTALLATION

### 4.1 Preparation

1. Remove all binding blocks and skids used for shipping.
2. Check shipping list to make certain all components and/or accessories are present.

### 4.2 Location

The Cantrell Whole Bird Cut-Up Saw Model CS-100 machine to be installed in the cut-up location of second stage processing.

### 4.3 Electrical

Before using Cut-Up Saw make certain taht all electrical receptacles are properly grounded.

## ADJUSTMENTS

### 4.4. Blade - Up / Down

Loosen motor mounting hardware and slide motor up or down to adjust blade depth in Guide Rod slot. Figure 4-1.

**NOTE:**

When adjusting the blade  
make sure that the blade remains centered  
in the Guide Rod slot.

### 4.5 Blade Guard

The Blade Guard is factory adjusted at the bottom of the mounting slots. For safety reasons, do not tamper with this adjustment (See Section V).

**WARNING**

The Cutter Blade in this machine is  
dangerous! Avoid any contact with the blade  
when it is in operation!

### 4.6 Table / Frame

Adjust Guide Rod to desired working height by moving adjusting feet up or down.  
See Figure 4-2.

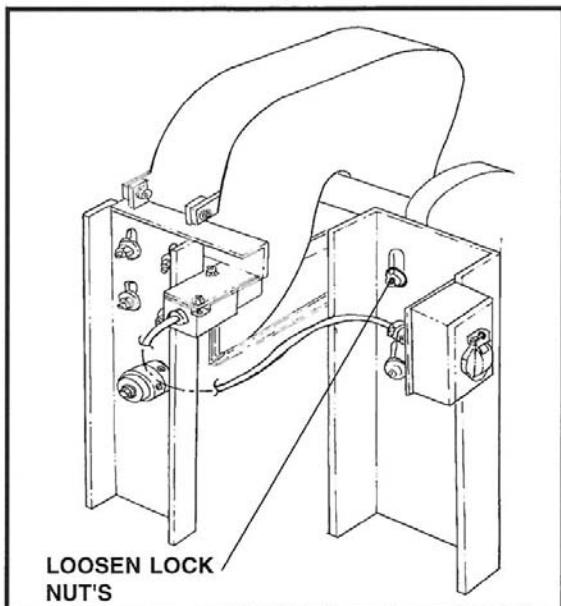


Figure 4-1

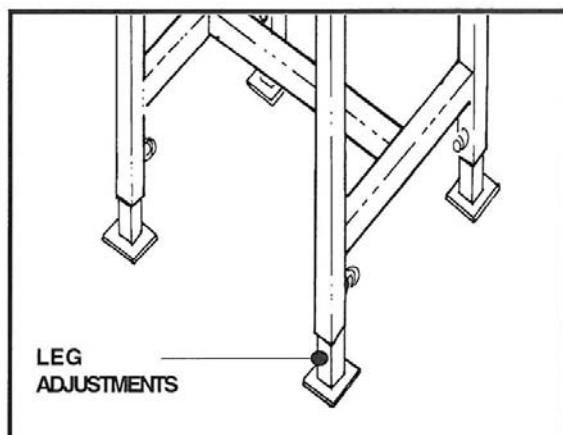


Figure 4-2

## Section V MAINTENANCE

### 5.1 Blade Removal / Replacement

Blade is 9" diameter. Replace after the blade is worn to 8" diameter.

#### NOTE:

The Blade Guard is factory adjusted to the bottom of the mounting slots. After replacing Blade, make sure that the Blade Guard is readjusted to the bottom of the slots!

1. Make sure power is OFF and the switch is tagged with a "LOCK-OUT" tag.
2. Raise blade cover and secure the place.
3. Loosen blade guard mounting hardware.
4. Loosen Guide Road mounting hardware.
5. Use vise grips to prevent arbor from turning and then glade nut c.c.w. to remove.

#### NOTE:

It will be necessary to pad arbor with a non-skid material to prevent marring from the vise grips.

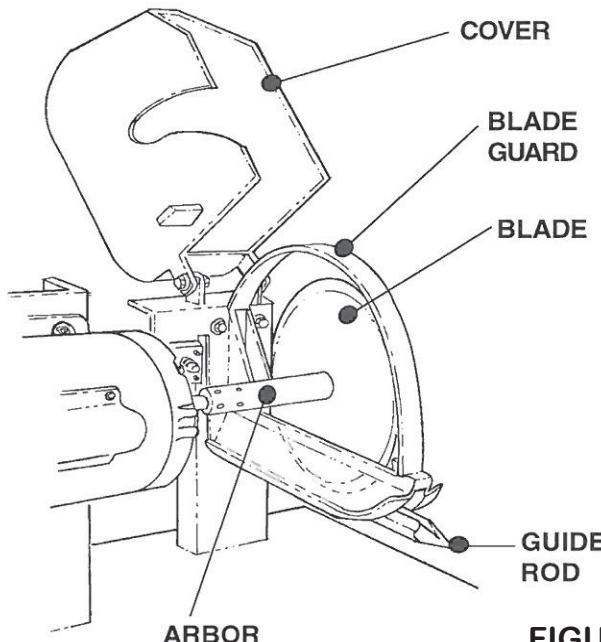
6. After removing blade nut and washer, tilt blade as necessary to remove.

#### WARNING:

Wear Gloves to prevent injury!

Blade is sharp!

7. The machine should be cleaned thoroughly at the end of each shift. Use only U.S.D.A. approved detergent and high pressure, hot water. Rinse thoroughly.



**FIGURE 5-1**

## Section V MAINTENANCE

### 5.2 Cleaning

The Cantrell KFC Cut-Up Saw Model CS-100 should be thoroughly washed down and cleaned with water at the end of every shift change. This helps in keeping the machine in its optimum operating capacity as well as promoting overall sanitation.

### 5.3 Lubrication

Refer to the following sources for U.S.D.A. approved lubricants for both food and nonfood contact.

1. "List of Proprietary Substances and Nonfood Compounds" - This publication is available through the Food and Safety Inspection Service. Publication Number 1419.
2. Contact your representative from your chemical vendor for specific products they carry for lubrication that are U.S.D.A. approved for food and nonfood contact.

### 5.4 Lubrication Chart

Component	Lubricant	Interval
Chains	Spray	Daily
Bearings	Grease	Weekly
Housings	90W	Weekly
Gearheads	90W	Weekly
Transfers	Grease	Weekly

## Section VI PARTS

### 6.1 Parts Ordering Procedure

1. Locate Assembly in Parts Section.
2. Find "LOC." number of desired component on Parts Drawing.
3. Refer to Parts List with "LOC." number.
4. Record Part Number and Description with Quantity desired.
5. Contact Cantrell Parts Department Toll Free at (800) 922-1232 or on the Parts Department Fax (770) 287-8365.

#### CAUTION

Always when ordering parts for the Cantrell KFC Cut-Up Saw Model CS-100, use the information in the Parts Section of the manual.  
This will help ensure proper part selection and speedy shipment to you.

## Section VI PARTS

### 6.2 PARTS DIAGRAM

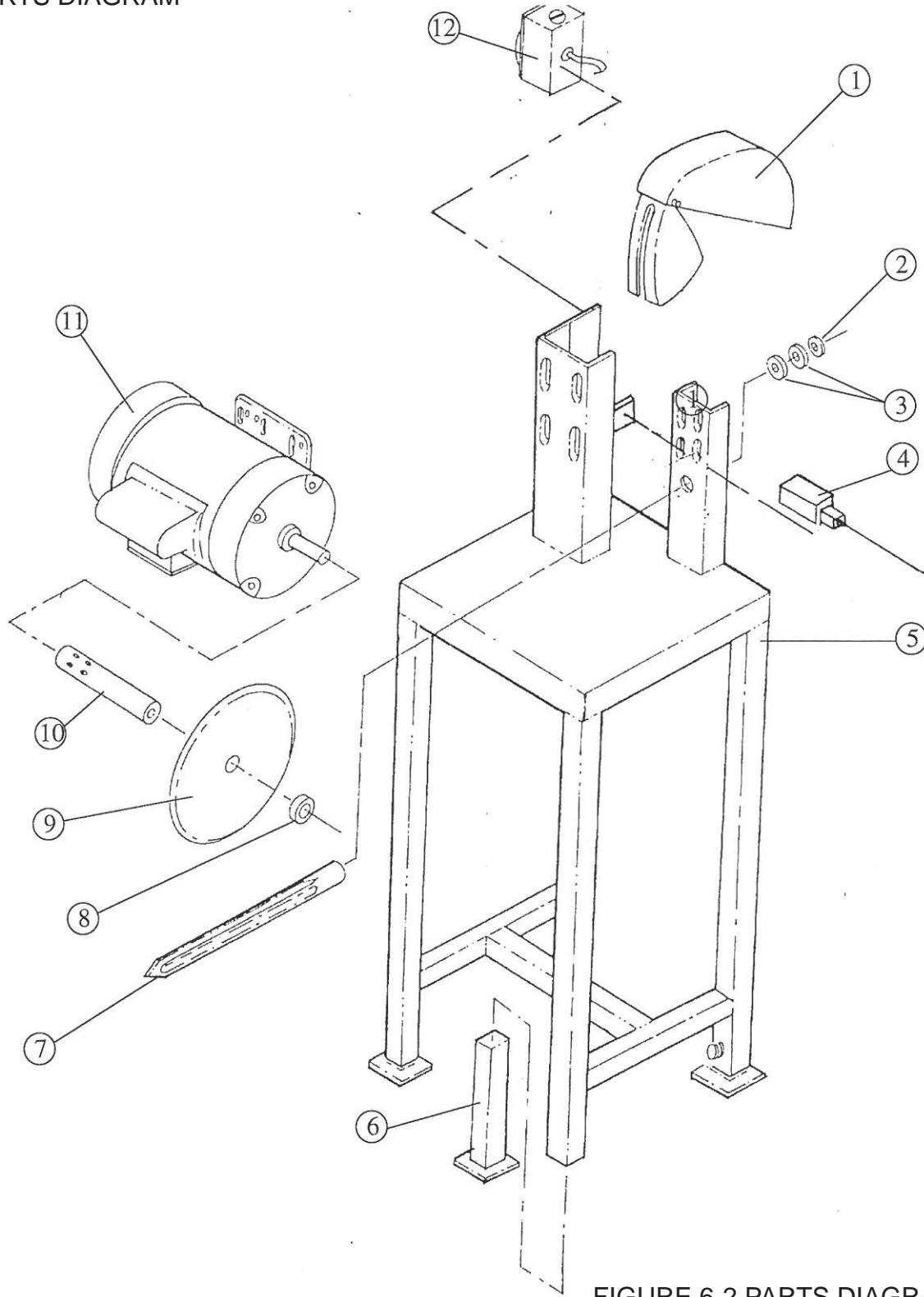


FIGURE 6-2 PARTS DIAGRAM

## Section VI PARTS

### 6.2 Parts List

LOC.	PART NUMBER	DESCRIPTION	QTY.
1	N027008	Cover	1
2	210032	Set Collar	1
3	AM20049	Washer	2
4	991016	Switch	1
5	DM83200	Frame Assembly	1
6		Adjustable Feet	4
7	N027014	Guide Rod	1
8	N027015	Arbor Washer	1
9	N027005	Blade	1
10	B4591 B13608	Arbor Right Hand Arbor Left Hand	1 1
11	390631SS	Motor	1
12	991089	Switch Box	1
13	991059	Plate	1

## Section VII MAINTENANCE RECORD

## MAINTENANCE RECORD

## Cantrell KFC Cut-Up Saw (Whole Bird) Model: CS-100

CUSTOMER NAME :

SERIAL NUMBER :

DATE :

In keeping with our commitment to provide our customers with superior service, this manual has been designed to allow for equipment and trouble-shooting updates for the CS-100 Cantrell KFC Cut-Up Saw as they become available. Please provide us with the following information and fax it to Cantrell. This will ensure that you receive the most up to date information available on this piece of equipment.

NOTE: If this is not returned, you WILL NOT receive updates including part number changes, corrections, revisions, trouble-shooting instructions, etc.

- I would like to receive equipment and trouble-shooting updates for this manual via email.
- I would like to request additional copies of this manual.

ATTENTION : \_\_\_\_\_

ADDRESS :  
\_\_\_\_\_  
\_\_\_\_\_