

## OPERATORS AND PARTS MANUAL MODEL 625NS, CHIPPER/SHREDDER/VAC



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**MANUFACTURER OF OUTDOOR POWER EQUIPMENT**

**Products for Turf & Lawncare, Rental, Construction, Tree care, Wood Processing, Nursery & Farm Industries**

*Other Salsco Equipment*

**3-1/2" - 18", Gas, Diesel, and P.T.O, Wood/Brush Chippers**

**Chipper Shredder Vacuum - Tailgate & Truckloader Vacuums up to 65 HP**

**Shaving Mills - Gas and Electric Greens Rollers**

***Quality of Workmanship, Innovative***

***Design, Built to Last!***

105 School House Road

Cheshire, CT 06410 U.S.A.

800-872-5726, 203-271-1682, 203-271-2596 (Fax)

sales@salsco.com, www.salsco.com

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SALSCO, INC.  
105 School House Road  
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## **STATEMENT OF FACT**

You have just purchased the highest quality, most dependable, Chipper Shredder Vacuum, on the market today. This unit has the ability to meet exact standards and perform for years with minimum downtime. HOWEVER, it cannot read nor will it understand this manual no matter how long you leave it on top of the machine.

**It is your responsibility** to read and understand this manual; it is also your responsibility to be certain this information is passed along to anyone who is expected to operate this equipment. Should you choose not to read, understand and pass along the information provided you, please expect equipment failure and possible injuries to persons around this equipment.

For the safety of the operator, it is **imperative** that this manual is carefully read and understood.

Once you have read this manual, it is your responsibility to be sure that all new operators read and understand this manual, especially all cautions stated.

As a manufacturer of equipment, we have a responsibility to design a safe piece of equipment. NOTE: The important safeguards and instructions in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution, and care are factors, which cannot be built into any product. These factors must be supplied by the person(s) caring for and operating this equipment.

## **ONLY YOU CAN PREVENT ACCIDENTS!!**

## SPECIFICATIONS & FEATURES

**ENGINE:** 25 Hp Kohler, O.H.V., Throttle, Key Switch, Muffler with Guard

**ELECTRIC:** 12 Volt, automotive type. Battery box shock mounted, with brackets, lockable

**CLUTCH:** Centrifugal

**AXLE:** T-flex axle, independent suspension

**TIRES:** 6-Ply x 26" diameter, F78-14ST tubeless

**LIGHTS:** Full light package, D.O.T. approved

**TRAILER/FRAME:** 2" x 4" square tubing, 1/4" wall. Continuous welds for extra strength. 2-Safety chains, 27" long with S-Hook. Heavy duty diamond plate fenders, with light enclosures. 2" Ball coupler. Swivel top wind jack, 1,000 lb. lift capacity, adjustable

**FUEL TANK:** Portable, polyethylene, marine type, with pressure gauge & fuel gauge. 6.6 gallon capacity.

**INFEED TRAY:** 46" to pinch point with fold up safety tray down. 32" wide x 21-1/2" high at widest point. 5" x 5" debris opening. Control bar/Safety brake mounted above chipper infeed hopper.

**CUTTER DISC:** 24" diameter x 1" thick steel. 2" diameter main shaft. 6 Fans, Fully welded and gusseted. 6 - Chip Blades - 3/8" x 1-3/4" x 4-1/2". Horizontal bed knife, double sided, adjustable, sharpenable & replaceable. Lockable 1/4" thick steel housing. Easy access to maintain chip blades

**FLAIL CAGE:** 32 Flail blades on four hardened steel shafts. Unit can be ordered with up to 64 flail blades on 8 shafts for more shredding ability.

**HOSE:** Heavy Duty 12" diameter x 10' long.

**DISCHARGE:** 360° exhaust chute with adjustable exhaust flap.

**BEARINGS:** Heavy duty, cast iron, greaseable

**BELTS:** 1 - 3B58, triple section, single back v-belt

**PULLEYS:** Cast iron with taperlock centers

**PAINT:** Baked powder coat enamel polyester, resists ultra violet rays. Orange.

**DIMENSIONS:** Transport length - 108", Transport height - 96", Transport width - 69". 1,620 lbs.

SPECIFICATIONS & OPTIONS, SUBJECT TO CHANGE WITHOUT NOTICE - 7/03

## MACHINE REGISTRATION

MANUFACTURED BY:

SALSCO, INC.

105 School House Rd., Cheshire, CT 06410

800-872-5726, 203-271-1682, 203-271-2596 (Fax)

[sales@salsco.com](mailto:sales@salsco.com) [www.salsco.com](http://www.salsco.com)

THIS MANUAL COVERS MODEL (s): 625NS, Chipper Shredder Vacuum

This company reserves the right to discontinue, add improvements to, or change the design of any model or product at any time without obligation to improve existing machines, either by changing the design or adding new parts.

It has been and will continue to be the policy of SALSCO to update existing machines at its own discretion. Whenever possible, new designs will be made in such a way that they can be "Retro Fit" if so desired.

Record in the space provided below the model and serial number of this unit. Please retain these numbers for future reference.

No parts orders will be accepted **WITHOUT MODEL NUMBERS OR PART NUMBERS**. All part numbers are listed in this manual.

---

Serial Number

---

Model Number

NOTE: Be sure to complete your warranty card. This will insure immediate processing of any warranty claims.

**READ AND UNDERSTAND THIS MANUAL BEFORE STARTING THE MACHINE**

1/06

## CAUTIONS

### SALSCO CHIPPER / SHREDDER / VAC

1. **ALWAYS** use protective eyewear when machine is in operation.
2. **ALWAYS** use gloves and wear ear protection when machine is in operation.
3. **NEVER** put hands into or near Chipper/Shredder/Vac intake or discharge openings.
4. **NEVER** run with guards removed.
5. **ALWAYS** allow machine to cool off, remove key and put engine in neutral before attempting any maintenance, or repair.
6. **DO NOT** operate with loose clothing or long unrestrained hair. Be sure vines and branches are not wrapped around your body parts.
7. **DO NOT** operate on ice or any other slippery surface. Be sure area around machine is clear and clean. You don't want to trip into the machine.
8. **NEVER** leave machine running unattended, especially around youngsters or persons not instructed in the safe operation of this machine.
9. **NEVER** do any work on this machine without disconnecting the spark plug.
10. **READ** federal guidelines (pages 9 - 10) provided with this manual.

**BRUSH CHIPPERS**  
**ANSI Z133.1-2006**  
American National Standard for Arboricultural Operations  
Safety Requirements

**5.3 Brush Chippers**

- 5.3.1 The items contained in section 5.1 shall always be included in the review of this section.
- 5.3.2 Access panels (for example, guards) for maintenance and adjustment, including discharge chute and cutter housing, shall be closed and secured prior to starting the engine of brush chippers. These access panels shall not be opened or unsecured until the engine and all moving parts have come to a complete stop (see Annex C, General Safety Procedures That Apply to All Tree Work).
- 5.3.3 Rotary drum or disc brush chippers not equipped with a mechanical infeed system shall be equipped with an infeed hopper not less than 85 inches (2.15 m) measured from the blades or knives to ground level over the center line of the hopper. Side members of the infeed hopper shall have sufficient height so as to prevent workers from contacting the blades or knives during operations.
- 5.3.4 Rotary drum or disc brush chippers not equipped with a mechanical infeed system shall have a flexible anti-kickback device installed in the infeed hopper to reduce the risk of injury from flying chips and debris.
- 5.3.5 Chippers equipped with a mechanical infeed system shall have a quick-stop and reversing device on the infeed system. The activating mechanism for the quick-stop and reversing device shall be located across the top, along each side, and close to the feed end of the infeed hopper within easy reach of the worker.
- 5.3.6 Vision, hearing, and/or other appropriate personal protective equipment shall be worn when in the immediate area of a brush chipper in accordance with section 3.4, Personal Protective Equipment.
- 5.3.7 Arborists, mechanics, and other workers shall not, under any circumstances, reach into the infeed hopper when the cutter disc, rotary drum, or feed rollers are moving.
- 5.3.8 When trailer chippers are detached from the vehicles, they shall be chocked or otherwise secured in place.
- 5.3.9 When in a towing position, chipper safety chains shall be crossed under the tongue of the chipper and properly affixed to the towing vehicle.
- 5.3.10 See section 8.6, Brush Removal and Chipping, for additional requirements.

**BRUSH REMOVAL AND CHIPPING**  
**ANSI Z133.1-2006**  
American National Standard for Arboricultural Operations  
Safety Requirements

**8.6 Brush Removal and Chipping**

- 8.6.1 Traffic control around the jobsite shall be established prior to the start of chipping operations along roads and highways (see section 3.2, Traffic Control Around the Jobsite).
- 8.6.2 Brush and logs shall not be allowed to create hazards in the work areas.
- 8.6.3 To prevent an entanglement hazard, loose clothing, climbing equipment, body belts, harnesses, lanyards, or gauntlet-type gloves (for example, long-cuffed lineman's or welder's gloves) shall not be worn while operating chippers.
- 8.6.4 Personal protective equipment shall be worn when in the immediate area of chipping operations in accordance with section 3.4, Personal Protective Equipment, of this standard.
- 8.6.5 Training shall be provided in the proper operation, feeding, starting, and shutdown procedures for the chipper being used.
- 8.6.6 Maintenance shall be performed only by those persons authorized by the employer and trained to perform such operations.
- 8.6.7 Brush and logs shall be fed into chippers, butt or cut end first, from the side of the feed table center line, and the operator shall immediately turn away from the feed table when the brush is taken into the rotor or feed rollers. Chippers should be fed from the curb-side whenever practical.
- 8.6.8 The brush chipper discharge chute or cutter housing cover shall not be raised or removed while any part of the chipper is turning or moving. Chippers shall not be used unless a discharge chute of sufficient length or design is provided that prevents personal contact with the blades (see Annex C, General Safety Procedures That Apply to All Tree Work).
- 8.6.9 Foreign material, such as stones, nails, sweepings, and rakings, shall not be fed into chippers.
- 8.6.10 Small branches shall be fed into chippers with longer branches or by being pushed with a long stick.
- 8.6.11 Hands or other parts of the body shall not be placed into the infeed hopper. Leaning into or pushing material into infeed hoppers with feet is prohibited.
- 8.6.12 While material is being fed into the chipper infeed hopper chute, pinch points continually develop within the material being chipped and between the material and machine. The operator shall be aware of this situation and respond accordingly.
- 8.6.13 When feeding a chipper during roadside operations, the operator shall do so in a manner that prevents him or her from stepping into traffic or being pushed into traffic by the material that is being fed into the chipper.
- 8.6.14 When using a winch in chipper operations, the operator shall ensure that the winch cable is properly stored before initiating chipper operations.
- 8.6.15 Refer to section 5.3, Brush Chippers, for additional information.



## OPERATING INSTRUCTIONS

### SALSCO CHIPPER / SHREDDER / VAC

1. Be sure all guards are in place.
2. Check both chambers to be sure they are free and clear of debris.
3. Check engine oil and fuel levels, as per engine manufacturers specifications.
4. Set engine throttle just above idle, and set choke. Make sure belt engage lever is in neutral position.
5. Start engine and let idle for a few minutes to warm up.

**\*CAUTION: NEVER LOOK INTO EITHER CHUTE. NEVER REACH, FOR ANY REASON, INTO ANY PART OF THIS MACHINE.**

6. Engage belt slowly. After belt engages, gradually bring engine up to full R.P.M. in small increments. Unit is ready to use when engine is running at full R.P.M.

**\*CAUTION: NEW BELTS WILL "CHATTER". THIS IS NORMAL AND CHATTER WILL DECREASE AS BELT WEARS IN.** (See HINT #6 on this page).

7. In chipper side, machine will take a maximum of 4-1/2" diameter limbs and branches.
8. In shredder side, machine will take a maximum of 1" diameter branches, leaves, paper, etc.

**\*CAUTION: WHEN USING SHREDDER SIDE, BE SURE BRANCHES, VINES, ETC. ARE NOT WRAPPED AROUND YOUR BODY PARTS.**

9. Lay vacuum hose on ground and rake leaves, small branches and leftover debris into hose.

### HINTS

1. When putting brush in shredder side, throw material in and let it go, do not put it in. IF IT GETS STUCK, LEAVE IT. The next branch will pull it in. **DO NOT REACH INTO HOPPER.**
2. When using the chipper side and you have a **SHORT PIECE OF WOOD BOUNCING AROUND IN THE HOPPER, LEAVE IT.** The next branch will push it in. **DO NOT REACH INTO THE HOPPER FOR ANY REASON.**
3. When at low idle, you may hear a loud clanking noise. This is most likely the flail blades. Noise should disappear with a higher R.P.M.
4. When feeding leaves into the shredder side or vacuum hose, feed them slowly. A large volume of wet leaves at once can clog the machine.

**OPERATING INSTRUCTIONS**  
(Continued)  
**SALSCO CHIPPER / SHREDDER / VAC**

5. Before turning machine off, let it run at full RPM a few minutes to make sure that all material has been discharged.
6. When machine is new or when putting on a new belt: apply a finger full of grease to the underside of belt. Be sure engine is off. **NEVER REACH INTO BELT AREA OR BEHIND BELT GUARD WHILE ENGINE IS RUNNING.**

**NEVER REACH INTO, OR LOOK INTO CHUTES OR HOPPER FOR ANY REASON  
WHILE RUNNING MACHINE.**

**WHILE PERFORMING MAINTENANCE OR REPAIR, ALWAYS REMOVE KEY  
FROM ENGINE. ENGINE IS IN NEUTRAL.**

## SERVICE SCHEDULE

### SALSCO CHIPPER / SHREDDER / VAC

1. ENGINE - Follow service and maintenance schedule set forth by manufacturer in engine manual.
2. Grease main bearings once a day or as needed. **DO NOT OVER-GREASE.** Wipe extra grease off bearings. Grease engine slides weekly.
3. Be sure to clean entire machine, especially around engine box, after using.
4. TO SHARPEN/REPLACE CHIPPER BLADES: Remove key from engine. Remove spark plug wire. Engine is in neutral. Either remove chipper chute or chipper blade access door. On earlier models remove chute, on later models remove chipper blade access door. Apply heat with Oxy-Acetylene torch at about 180°. This will loosen the Locktite and allow the screws to be removed. **CAUTION: When you reassemble, be sure to use Locktite (Salsco uses Blue 242 Locktite) and replace all hardware.** Sharpen blades as you would sharpen a lawn mower, under angle edge only. Sharpen blades as evenly as possible.

**HINT:** It is strongly recommended to have a set of blades and screws on the shelf to prevent downtime.

**HINT:** Blades need sharpening when unit stops or slows down feeding itself. If you have to push material in, then the chipper blades need to be sharpened.

5. REPLACE FLAIL BLADES: Remove key from engine. Engine is in neutral. Remove exhaust chute brace. Unbolt hex head bolts on three sides of shredder barrel housing. Two people are needed to flip barrel assembly over. Shredder hopper doors will open and act as legs to support barrel housing.

**CAUTION: DO NOT, UNDER ANY CIRCUMSTANCES, START ENGINE WHEN UNIT IS OPEN OR AT ANY TIME WHEN PERFORMING SERVICE OR MAINTENANCE.**

**HINT:** This would be a good time to do a visual inspection. When checking parts for damage, remember, "when in doubt, throw it out". Be safe not sorry.

Loosen split collars, remove flail blades from shaft.

**HINT:** Pay attention to spacer positions.

Replace damaged flail blades and reassemble. Be sure when replacing flail blades to put biting edge on leading side into rotation.

**ATTENTION TO SERVICE AND MAINTENANCE PREVENTS DOWNTIME**

## **SERVICE SCHEDULE**

(Continued)

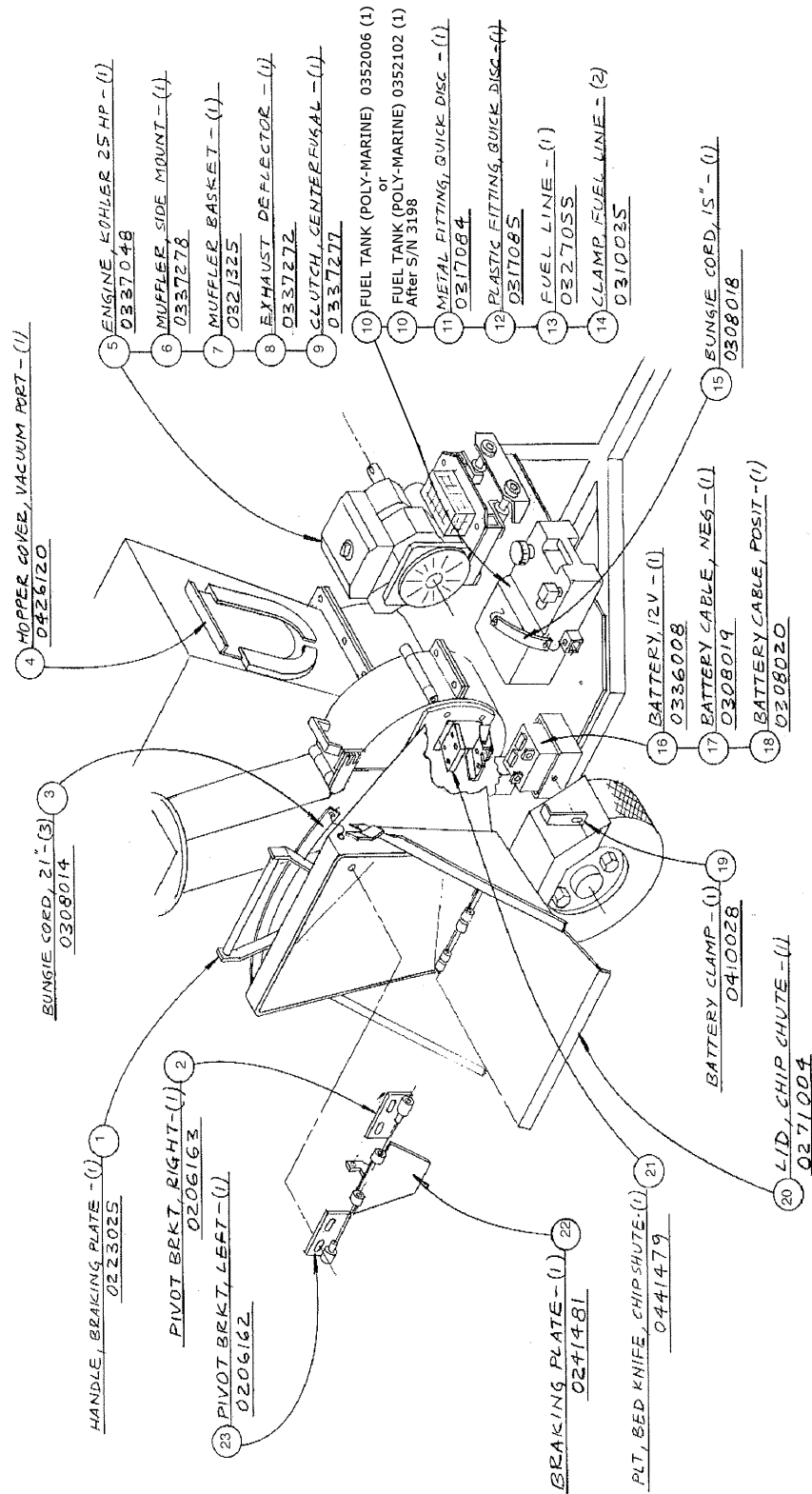
### **SALSCO CHIPPER / SHREDDER / VAC**

Check band belt periodically. Tighten as necessary as follows: Remove key from engine, engine is in neutral. Remove belt guard. Activate engine engage lever to observe linkage. NOTICE: By loosening two bolts of clutch linkage to frame, you can then slide linkage as necessary to adjust belt tension.

HINT: When machine is new or when putting on a new belt, apply a finger full of grease to underside of belt.

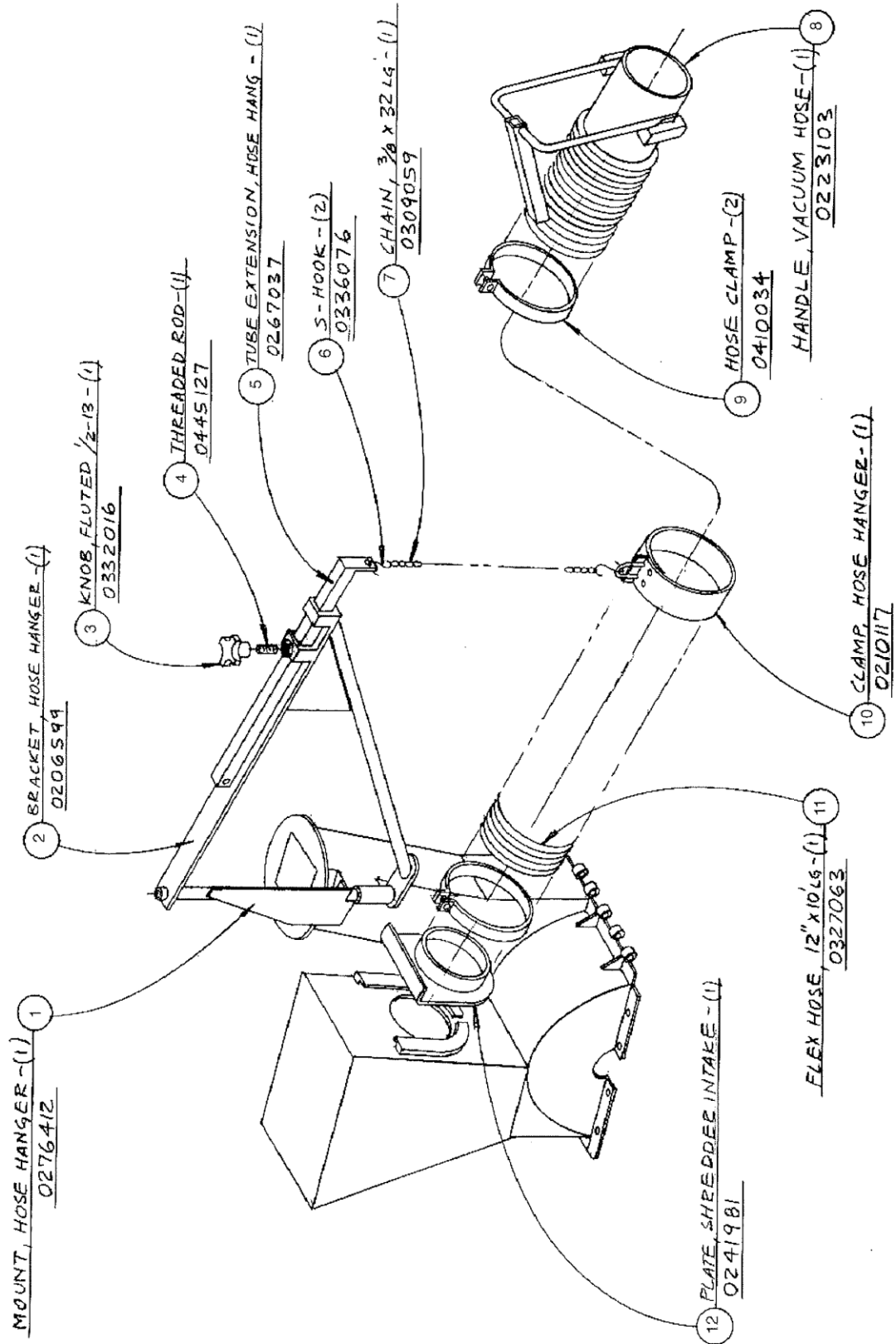
**NEVER PERFORM ANY SERVICE, MAINTENANCE OR REPAIR WHILE MACHINE IS RUNNING.**

# DRAWING # 1

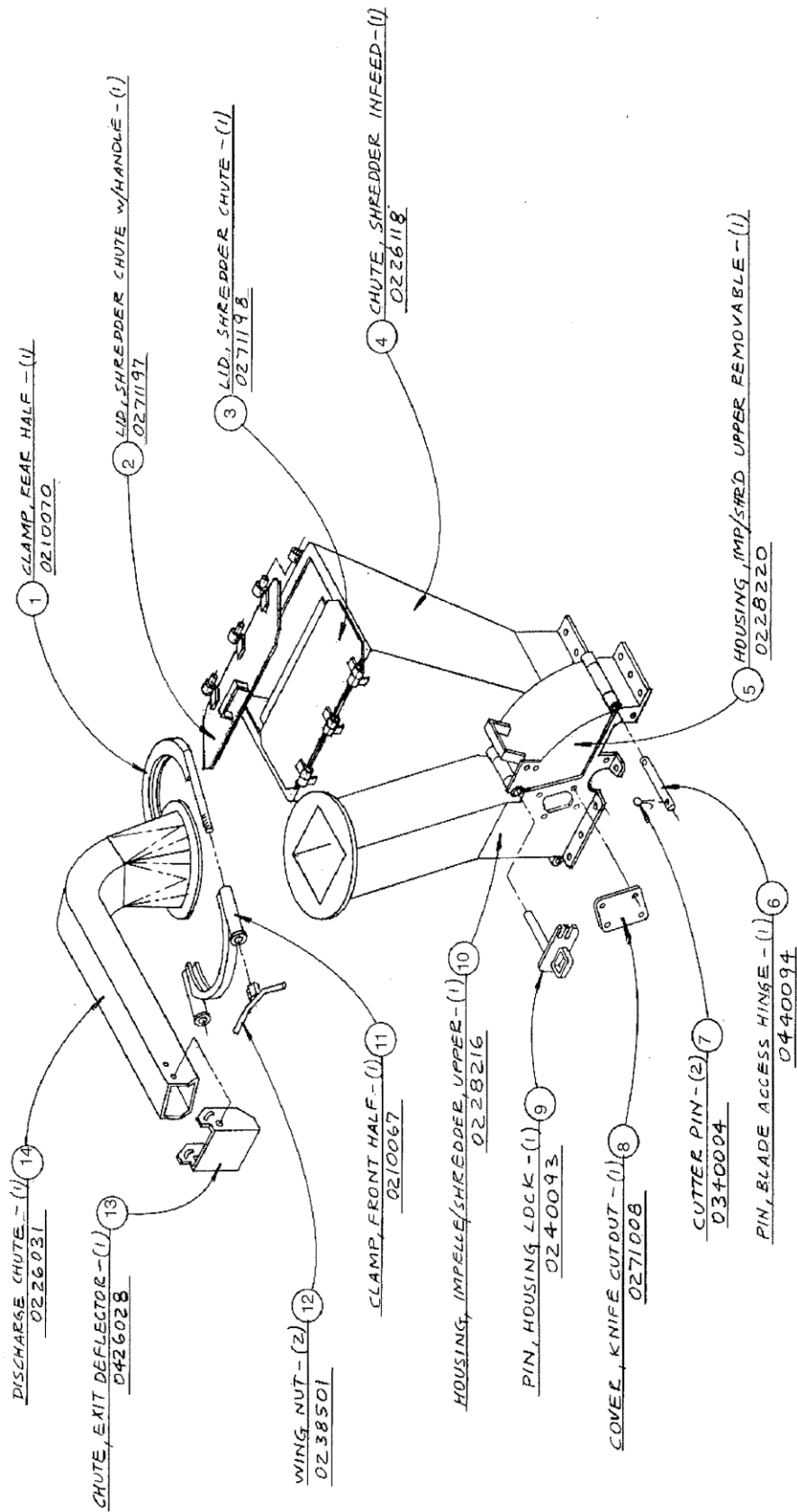


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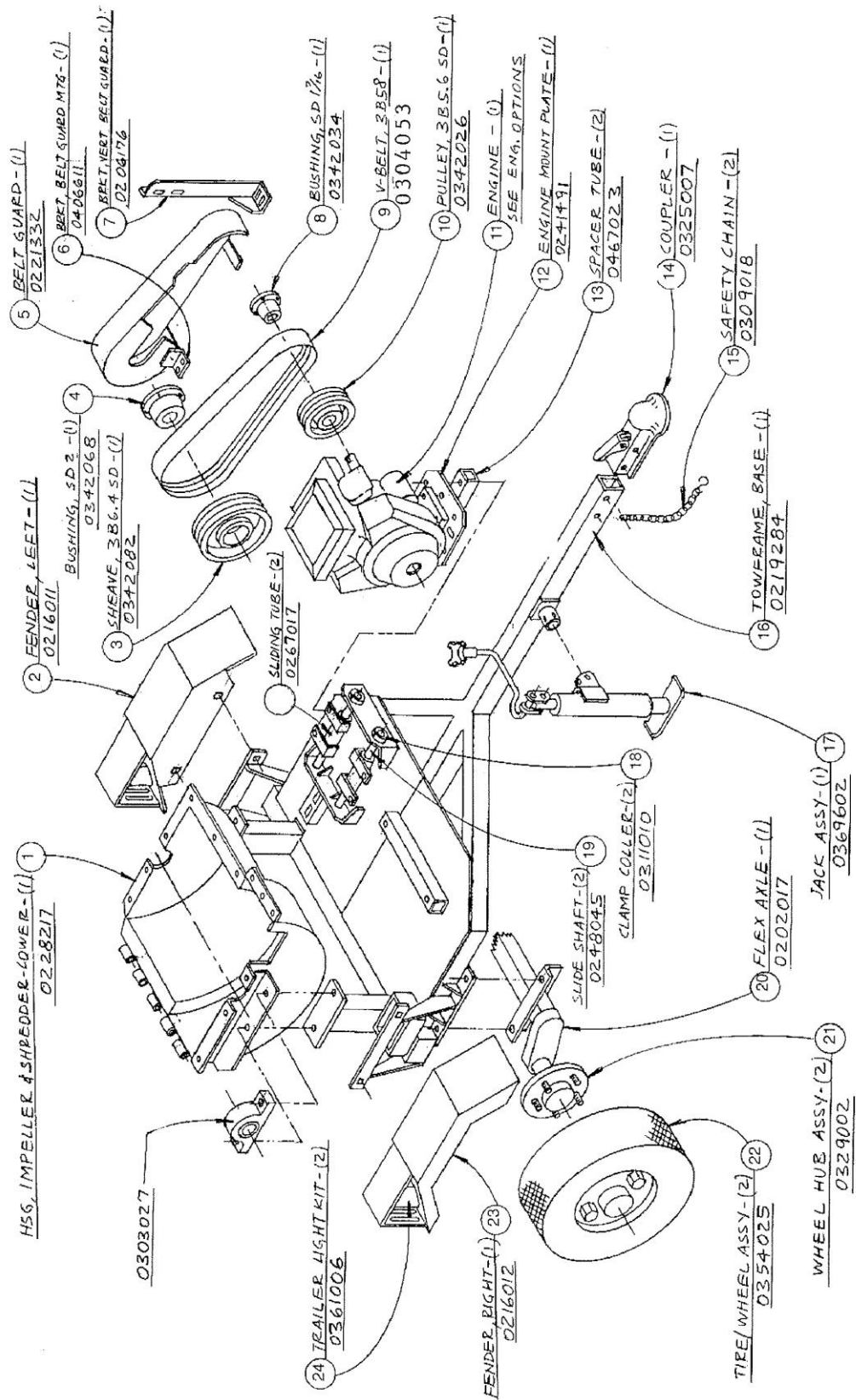
DRAWING # 2



# DRAWING # 3

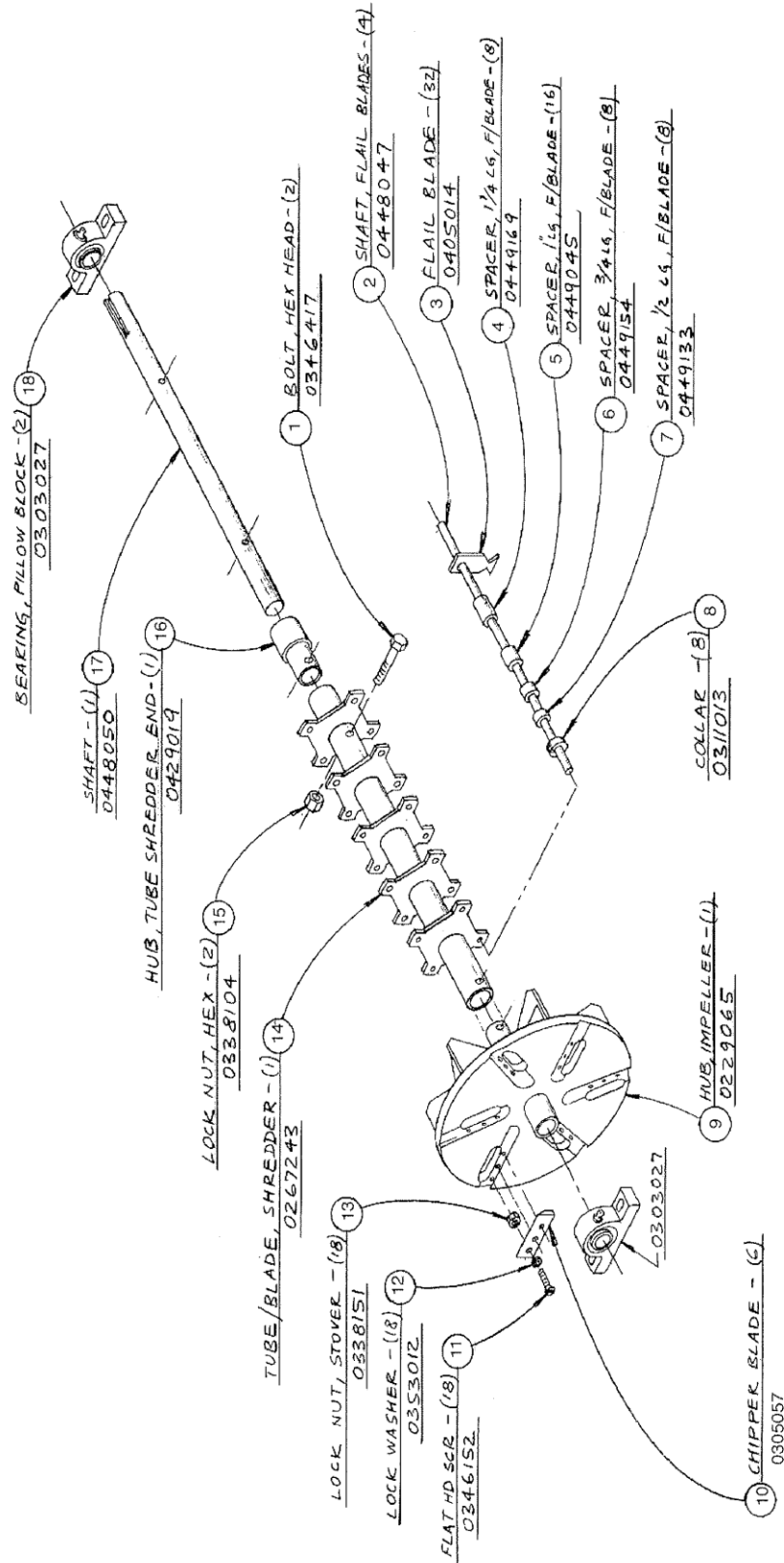


# DRAWING # 4





## DRAWING # 5



NOTE: UNITS WITH THE 64 FLAIL CAGE ASSEMBLY WILL REQUIRE TWICE THE AMOUNT OF THE FOLLOWING ITEM #'S  
2, 3, 4, 5, 6, 7, & 8.

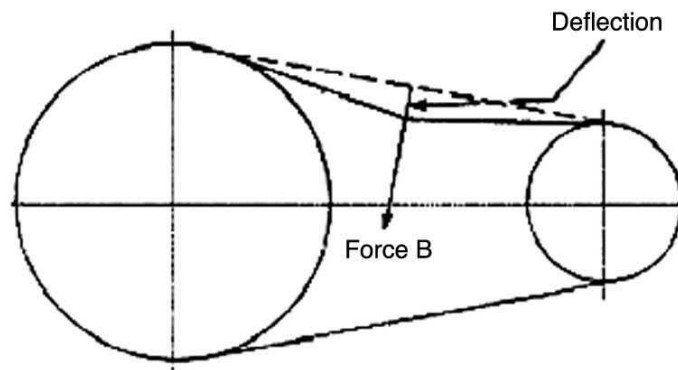
ITEM # 14 = TUBE/BLADE SHREDDER (64 FLAIL BLADE OPTION) - PART # 0267281

Below is a quick reference chart for various “Flat Head Cap Screws” and the torque recommendations.

**VALUES ARE STATED IN FOOT POUNDS**

BOLT SIZE	Thds Per Inch	SAE Grade 5	SAE Grade 8
1/4	20	10	14
	28	---	---
5/16	18	19	29
	24	---	---
3/8	16	33	47
	24	---	---
7/16	14	54	78
	20	---	---
1/2	13	78	119
	20	---	---
9/16	12	114	169
	18	---	---
5/8	11	154	230
	11	---	---
3/4	10	257	380
	10	---	---
7/8	9	382	600
	9	---	---
1	8	587	700
	8	---	---

Drive Belt Tension Measurement by Deflection



Deflection should be 3/8" when 8-12 lbs. push is applied at "B"

## **WARRANTY POLICY**

Your Salsco Commercial or Turf Equipment product is a commercial type product and is normally manufactured and sold for commercial or industrial use. **Salsco will, for the original purchaser, for one (1) year from the date of purchase (90 days if used for rental purposes) repair or replace, free of charge, any part or parts found to be defective in material, workmanship or both.** Any transportation or shipping charges will be borne by the purchaser. If, during the warranty period stated above, the product does not function properly due to defect, simply contact Salsco and follow the Warranty Procedures included in this manual.

This warranty **does not** include incidental or consequential damages and is exclusive of any implied warranties.

This warranty **does not** cover normal maintenance parts, including, but not limited to hoses, chains, belts, filters, lubricants, etc.

This warranty **does not** include parts or components, which are covered under the original manufacturer warranty, including, but not limited to engines, pumps, and motors.

## **WARRANTY PROCEDURE**

In order for Salsco to process your warranty claims in a timely manner you must follow the simple procedures listed below:

### **MACHINE OR PART FAILURE**

- a) Call our service department for helpful instruction on how to correct or repair the problem. Preventive maintenance will also be suggested.
- b) Fill in all information requested on warranty claim form, a copy of which is included in this manual, (date of purchase, company name, address, etc.).
- c) List all parts used. Make sure part numbers are correct. You can obtain these from your manual. Any parts that you believe to be defective or any parts that break should be retained for possible inspection until after the warranty has been paid or part has been replaced.

**PLEASE NOTE:**            *Warranty Claims will not be processed if Warranty Cards and Dealer Delivery Reports have not been returned to Salsco*

**PREVENTIVE MAINTENANCE IS YOUR BEST INSURANCE AGAINST EQUIPMENT FAILURE.  
BE SURE TO READ THIS MANUAL, ESPECIALLY THE MAINTENANCE, OPERATING AND  
CAUTION SECTIONS.**

**SALSCO, INC., 105 School House Rd., Cheshire, CT 06410  
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sales@salsco.com, [www.salsco.com](http://www.salsco.com)**

**12/99**

**WARRANTY CLAIM FORM**

**SALSCO, INC.**  
**105 School House Rd.**  
**Cheshire, CT 06410**

**Phone: (203) 271-1682, (800) 872-5726**  
**Fax: (203) 271-2596**  
**Email: s.clark@salsco.com**  
**Website: www.salsco.com**

**END OWNER****Date Submitted:**

Name:	Phone:	Work Order #:
Email:	Fax:	Office Use Only
Address:		Date Rec'd
		Cust ID:
		Salsco WC
		Salsco RA

**PURCHASED FROM**

Name:	Phone:	Date Approved:
Email:	Fax:	Date Rejected:
Address:		Processed By:
		Dir. Del Report on File: YES NO
		Warranty Card on File: YES NO
		Part(s) Total:
		Labor Total:

**Equipment/Warranty Information (Must be complete)**

Purchase Date:	Invoice #	Date Failed:	Total Approved:
Model #:	Serial #:	Repair Date:	Approved/Rejected:
Hrs Used:	Primary Use:		Name:
Warranty Claim/Work Order#:			Reason for Rejection:
Was a Salsco Return Authorization # issued for repairs or			
Return of Parts? YES NO			Suggested Preventative Maint:
Probable Cause of Failure:			

**Work Performed/Comments on Repair:**


Shop Labor Rate:						Submitted By:	
Total Labor Hours to Repair:						Printed Name:	
Parts Required for repair							
Salsco Part #: Description:						Qty.	Price Each
							Total
							Inv #

Fill in all information requested on warranty claim form.

**INCOMPLETE FORMS CANNOT BE PROCESSED & WILL BE RETURNED**

List all parts used. Make sure part numbers are correct. Any parts that you believe to be defective or any parts that break should be retained for possible inspection until after the warranty has been paid or part has been replaced.

SALESMAN ID # \_\_\_\_\_

SALES MANAGER'S NAME \_\_\_\_\_

800-872-5726, 203-271-1682  
203-271-2596 (Fax)**SALSCO, INC.**  
105 School House Road  
Cheshire, CT 06410**www.salsco.com**  
sales@salsco.com**DEALER DELIVERY REPORT**

MODEL:		SERIAL NO:	
DEALER:	CITY:	STATE:	ZIP:
PURCHASER:	ADDRESS:	CITY:	ST: ZIP:
The undersigned dealer warrants that the above-described machine was carefully inspected, adjusted and prepared for delivery before delivery to the purchaser; that both the operation and maintenance of the machine were explained to the purchaser; and that a copy of the Owner's Instruction Manual were given to the purchaser and his attention called to Our Warranty and any operating instructions included in the manual and caution notes.		The undersigned purchaser certifies that the operation and maintenance of the above-described machine have been explained to him; acknowledges receipt of a copy of the Owner's Instruction Manual and Our Warranty Policy printed in said Instruction Manual and Caution Notes. I also understand that it is my responsibility to explain and make Salsco manuals available to new operators.	
DATE:		DATE: PURCHASER:	
SIGN BY:		SIGN BY:	
PHONE: FAX:		PHONE:	
E-Mail:		EMAIL:	

MODEL:		SERIAL NO:	
<b><u>SALSCO LIMITED WARRANTY CARD</u></b>			
DATE PURCHASED:			
PURCHASER:	ADDRESS:	CITY:	ST: ZIP:
EMAIL:		PHONE:	
DEALER:		STATE: CT	
Will this equipment be used commercially?		Yes	No
Did Dealer service this equipment and instruct you in its care and safe operation?		Yes	No
Did you receive an "Operation & Service Manual" and safety pamphlet?		Yes	No
Signed		Purchaser	
<b><u>NOTICE:</u></b> IMPORTANT: THIS CARD MUST BE FILLED OUT COMPLETELY AND MAILED TO THE FACTORY WITHIN 10 DAYS OF PURCHASE DATE, OR YOUR LIMITED WARRANTY WILL BE VOIDED.			

## SERVICE RECORD

If kept properly, this schedule will help track problems in the future.

[illegible]

MODEL # \_\_\_\_\_ S/N \_\_\_\_\_

DATE PURCHASED: \_\_\_\_\_